

SEEDMATIC

Air-Pro

MK2-4132

TINE SEED DRILL





Introduction

Dear Valued Owner,

Congratulations, you have just made an excellent investment.

Your new Aitchison drill has been designed and engineered to give years of dependable service. Every consideration has been taken to incorporate the latest technology, thus ensuring optimum seeding is achieved. Aitchison Drills provide the optimum agronomic environment; ensure proper seedling germination, leading to superior crops and thus greater revenue earning potential.

It has often been said %when all else fails-read the operators manual+and to ensure you get the best from your new Aitchison drill it is very important that you thoroughly read through the entire contents of the manual. Please also pay attention to the maintenance recommendations, understand the calibration system and consider the design features and their specific functionality.

Your local dealer carries an extensive range of genuine Aitchison spare parts and consumables that also have been engineered to provide long service and life. It is important that only genuine parts are used on your drill.

Thank you for making your investment in our expertise.

Yours Sincerely,

Ross Simpson
Rob Baan

Directors
Reese Agri

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TECHNICAL SPECIFICATIONS

SEEDMATIC Air-Pro	MK2 4132
Overall Width . Transport	2.7m
Overall Width . Seeding	4.9m
Sowing Width	4.8m
Working Speed	6-15 km/h
Tractor HP (min)	120
Weight Empty	3600kg
Seed Hopper Capacity	1000lts
Fertiliser Hopper Capacity	1500lts
No. Tines	32
Row Spacing	150mm
Opener Stagger	400mm

Optional Extras:

Small Seeds Box / Granule Box	#A3880-ASSY
Electronic Drive kit	#ASA2389
Airpro Control Monitor	#A38089
Extra wide transport wheels	#A2249-23A

QUICK SYSTEM CHECK

1. Fan Hydraulics: has the drill been set to match your tractors hydraulic system? (Open/Closed centre system) o o o o o o o o o o o o o o ...see page 21.
2. Fan Hydraulics: does your tractor have a **PRESSURE FREE** return dump port?.....see page 21.
3. Drawbar Lift Hydraulic: when seeding ensure that your tractors hydraulic bank connected the Drawbar Lift Rams is kept in FLOAT o o o o o ...see page 16.
4. Seed Metering Units: has the metering units been set up to match your seed type & seeding rate? Ensure that the %Fine Seeds Lock+is locked in the correct position. o ..see page 24.

OPERATING TIPS

1. Run Fans Before Operating drill: by running the fans before seeding helps dry out the seed delivery tubes.
2. Run Fans After Seeding: this will help to clean out any seed/fertilizer that may still be in the air system.
3. Check Locks & Stops: check that the transport locks work & the carrier bolts are adjusted so they are carrying the weight of the machine in transit.
4. Transit Speed: keep your transport speeds below 40km/h at all times.
5. Turning: when seeding don't attempt tight turns, this will scuff up the ground and stress the tine especially in dry hard ground.
6. Storage: if you are storing the seed drill outside leave it in the unfolded state to prevent rain entering the delivery tubes.

TO THE OWNER AND OPERATOR

Your Aitchison drill has been carefully designed and manufactured to give you years of dependable service. To keep it running efficiently, read and follow the instructions in this operator's manual. Any questions you may have that are not covered in this manual should be referred to your dealer:

Dealers Name: _____

Address: _____

Phone No: Business: _____ Private: _____

Date of Purchase: _____

Model: _____ Serial Number: _____

WARRANTY

The warranty card on your Seedmatic Air- Pro Mk2 4132 Drill is included with this manual. Please ensure that the registration card is correctly filled in.

The owner must ensure the dealer, upon delivery of the machine, has completed the **WARRANTY REGISTRATION CARD**. This must be signed by the owner and returned to the factory promptly. **Failure to carry out this function could nullify warranty claim opportunities against the factory in the future.** Warranty claims will only be accepted for registered products.

Indemnity from liability is a complex subject. Our indemnity makes it clear that we are not liable for any claim lodged for breakdown, delays or machine down time, crop failure or any other contingency involving the use of our equipment. In all these circumstances the user can take precautionary measures to ensure that none of these problems occur . like having on-hand spare parts at the local dealer. Crop failures can be caused by countless problems . our job is to mechanically place seed in the soil and any mechanical malfunction preventing this happening can be checked during the seeding operation and rectified by the operator.

ORDERING PARTS AND ACCESSORIES

When ordering spare parts, quote the model and serial number of the drill and use the Aitchison part number given in the parts section. Reference to the right hand and left hand is taken from behind in the direction of travel.

SAFETY FIRST

Keep all covers in place when using the drill.
Stop the drill before making adjustments.
Lower the drill to the ground or put on props when working around the machine.
Tighten all nuts and bolts after initial use.

FOLLOW SAFETY INSTRUCTIONS

Carefully read all safety messages in this manual on your machine safety signs. Replace missing damaged safety signs, these can be ordered from your local Aitchison dealer.



Learn how to operate the machine and how to use controls properly. Do not let anyone operate it without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

If you do not understand any part of this manual and need assistance, contact your Aitchison dealer.

OPERATE YOUR MACHINE SAFELY

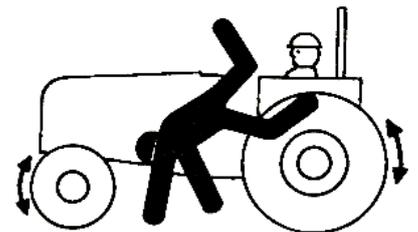
Be careful when operating machine to avoid injury.

Serious injury or death can result from contact with electric lines. Use care when moving or operating the machine near electric lines to avoid contact.



Be careful when operating on hillsides, tractor can tip sideways if it strikes a hole, ditch or other irregularity.

Permit only one person, the operator, on tractor platform while tractor and drill are in operation. Keep riders off the seed drill. They are subject to injury such as being struck by foreign object and being thrown off the machine. They also obstruct the operators view.



WEAR PROTECTIVE GEAR

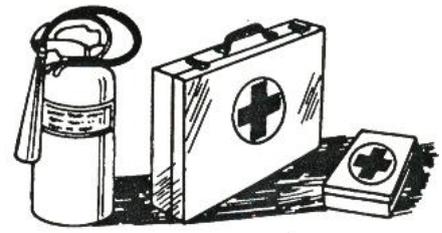
Wear close fitting clothes and safety equipment appropriate to the job.

Wear suitable hearing protective device as prolonged exposure to loud noise can cause impairment or loss of hearing. Wear safety gloves when working with discs as they can have sharp edges. Operating equipment safely requires the full attention of headphones while operating machine.



BE SAFE WITH CHEMICALS

Direct exposure to agricultural and hazardous chemicals can cause serious injury. Potentially hazardous chemicals used with Aitchison equipment include such items as lubricants, coolants, fertilizer, paint and adhesives. If in doubt, contact your local Aitchison dealer for information about chemical safety and first aid procedures. Keep a fire extinguisher and first aid kit handy.

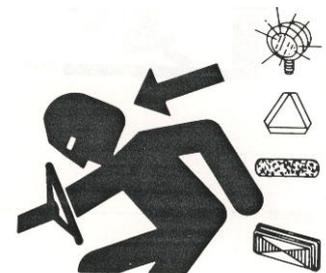


When disposing of chemicals, make sure hoppers are properly washed to get rid of any chemical residue and that any chemicals are disposed of in an approved manner. Follow instructions of chemical manufacturers for disposal methods.

USE SAFETY LIGHT AND DEVICES

Slow moving tractors and equipment can create a hazard when driven on public roads. They are difficult to see, especially at night. This could lead to personal injury or death if a collision with a vehicle occurs.

Whenever driving on public roads, use flashing warning lights. Provide extra lighting at night on machine and tractor. An implement safety lighting kit is available from Aitchison Industries.



TRANSPORT SAFELY

Do not exceed transport speed for machine; see your local Aitchison dealer. Never transport at any speed which does not permit adequate control of steering and stopping. Reduce speed over rough ground

For safe transport, tractor must weigh more than machine.

REDUCE SPEED WHEN TOWING LOADS

Braking to stop towed loads from transport speeds can cause the towed load to swerve and upset. Reduce speed if towed load weighs more than the tractor and is not equipped with brakes. Use additional caution when towing loads under adverse surface conditions, when turning and on lines.



PRACTICE SAFE MAINTENANCE

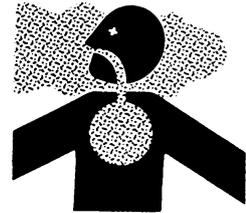
Understand service procedure before doing work. Keep area clean and dry.

Never lubricate, service or adjust machine while it is moving. Keep hands, feet and clothing from power driven parts. Disengage all power and operate controls to relieve pressure. Lower equipment to the ground. Allow machine to cool.

Securely support any machine elements that must be raised for service work.

Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.

Remove paint before welding or heating. Avoid potentially toxic fumes and dust when sanding, repainting or welding. Do all work outside in a well-ventilated area. Dispose of paint and solvent properly.



Avoid heating near pressurized fluid lines or other flammable materials. Pressurized lines can be accidentally cut when heat goes beyond the immediate flame, which could result in severe burns to yourself and bystanders.

Avoid high-pressure fluids. Escaping fluid under pressure can cause injury. Relieve pressure before disconnecting hydraulic or other lines.

DISPOSE OF WASTE PROPERLY

Improper disposing of waste can threaten the environment and ecology. Use leak-proof equipment when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them.



Do not pour waste onto the ground, down a drain, or into any water source. Use the manufacturer's directions on the correct way to recycle or dispose of waste.

USE A SAFETY CHAIN

A safety chain will help control drawn equipment should it accidentally separate from the drawbar.

Using the appropriate adapter parts, attach the chain to the tractor drawbar support or other specified anchor location. Provide only enough slack in the chain to permit turning.

Make sure that the chains you are using have a strength rating double or greater than the gross weight of the towed machine. Do not use the safety chain for towing.



GENERAL OPERATION IN THE FIELD

When the drill is in work in the field, adjust the front Depth Wheels evenly across the width of the drill; also adjust the rear Press Rollers across the width of the drill to give the required opener penetration.

The drill should always be moving forward when lowered or raised from work. Avoid stopping and never reverse with drill in work. These precautions will avoid blocking outlets; however make periodic checks for blockages while drilling.

The speed of travel is governed by the conditions e.g. if the ground is rough the drill may tend to bounce which would necessitate a lower speed. In optimum conditions 8 km/h may be maintained.

Always lift the drill out of the ground before turning sharp corners as this will protect the tines and openers and stop the turf from ripping.

Under no circumstances should the tractor wheels be allowed to slip excessively as this will break the turf and the following tines will tear up the ground. If slippage is a problem, use a tractor with more traction or wait for the ground to be in better condition. Towing chain or bar harrows behind the drill is very beneficial as this will crumble the groove and help to cover the seed.

PASTURELAND FARMING WITH THE AIRPRO MK2-4132

Continuous reaping of grasses either by machine or animal will eventually lead to their degeneration. Desired species of grasses and legumes will weaken and their ability to survive adverse climatic conditions will be diminished. Undesirable species of grasses and weeds will eventually tend to dominate or pasture may simply thin out with minimal plant populations. Of course conditions that cause pasture degenerations vary from location to location, and from country to country, but one can assume that every pasture can be improved no matter where its location.

MANAGEMENT CONSIDERATIONS

In describing the technique for sowing seeds into uncultivated soils, we should clarify the terminology. It is most common to refer to CONSERVATION TILLAGE (or CT) but it may be called SOD-SEEDING in Australia, or DIRECT DRILLING in UK or even NO-TILL SEEDING in North America. Wherever it is practical, successful conservation tillage requires well considered and thorough preparation, integrated with a whole farm management program.

The cropping rotation, optimum sowing dates and grazing fertilization program will depend on the seasonal vegetation or weed spectrum, paddock history, soil type, fertility and drainage, and many other factors.

Here is a checklist that should be followed for any CT program (courtesy of Monsanto NZ Ltd):

1. Check that the soil pH is around 6.0.
2. Check soil fertility levels for fertiliser requirement.
3. Ensure your spray boom has a marking system and is fully operational.
4. Establish optimum time for planting.
5. Check and control weeds present, before and during crop establishment.
6. Check and control insect and slug infestation before and during plant establishment.
7. Ensure soil conditions are suitable for drilling.
8. Inspect the crop regularly after planting.

Experience has shown that farmers new to CT often have crop failures on the first occasion, but as their skills and understanding of the technique improve, so do their crop results.

TECHNIQUES AND TIMING FOR PASTURE RENOVATION

There are two basic techniques for pasture renovation, i.e. rejuvenation and renewal. Rejuvenation is the most efficient technique and involves sowing the seeds of new and virile pasture grasses and legumes direct into existing pasture and have them gradually take over the old strain, without causing loss of production due to cultivation. This technique is known as stitching in. Renewal involves a total herbage control system, i.e. spray off old pasture with a wide spectrum herbicide before drilling.

Local knowledge is invaluable when determining which techniques to use and when to use them. The best time for pasture renovation will vary by region, and is largely governed by the temperature and weather that follow. In temperate climates with mild winters the autumn is best; and tropical climates the spring is the best time when the tropical grasses have not recovered from their winter dormancy. In arid climates the time is directly before or after summer rains.

The basic requirement for seed germination is a warm moist seed bed. The aim should be to sow the seed at a time when there is sufficient moisture for quick germination, and little likelihood for later drought. The Aitchison opener/coulter however will promote germination in much drier soils than any other known coulter when used correctly.

SIMPLE RULES TO FOLLOW FOR SUCCESSFUL PASTURE RENOVATION

		TEMPERATE PASTURELAND		TROPICAL PASTURELAND	ARID PASTURELAND
		REJUVENATION	RENEWAL		
TIME 	1.	Autumn or spring	Autumn	Spring	Before or after monsoonal rain
	2.	 Graze heavily	 Graze heavily	 * Mow with flail type mower	
	3.		 Allow 1 week to recover	 Allow 3 days to recover	
	4.	 Seed with Seedmatic	 Spray with total spectrum herbicide. Include insecticide	 Spray for insects. Can use light herbicide rate to control competition	
	5.	 Graze lightly	 Graze lightly	 Seed with Seedmatic	 Seed with Seedmatic

* An application of a total spectrum herbicide may replace mowing if the ground cover is short. Sowing must be done within 10 days.

MICRO INSECTICIDE GRANULES IN PASTURES

In New Zealand where grass grub is a problem, excellent control has been attained with the use of Gesapon, Dasanit, Dysiston, Mocap, and Lindane in control of this pasture destroyer. Normal rates applied on the pasture surface can be as high as 30 kg/ha but when sown in the soil and hence away from neutralizing effect sunlight, rates as low as four and five kg/ha can be used. If unexposed to sunlight these chemicals can remain effective in the soil as long as three months, thus killing generations of pupae as they emerge. Also, withholding of livestock after treatment is not necessary. Both these factors are important features with the Seedmatic Air-Pro.

Watch for slugs. Slugs like the moist groove produced by the wing blade opener. If slugs become a problem (eating seeds or seedlings underground), a suitable pellet should be used.

DIRECT SEEDING OF FEED CROPS AND ARABLE CROPS WITH SEEDMATIC AIR-PRO MK2 4132.

We are not in a position to give total formal recommended seeding rates, chemical usage and fertiliser recommendations because of the circumstance that the Seedmatic will be used in will be so varied and diverse that some misunderstanding can occur.

Refer to the checklist and ALWAYS confirm with known successful CT operators as well as your local seed specialist and chemical company representatives. Remember that with this technique the environment is not as predictable as with cultivated soils, and take the precaution of using insecticide or increased fertiliser if there should be any element of doubt.

Seeding programs are wide and varied and it is best to look at rotation that starts with a legume or feed crop followed by a grain crop, followed by another feed crop and so on. Heavy pasture into grain is always disappointing, but grain after legume or brassica is outstanding.

Here are just a few possibilities:

Brassicas, Turnips, Swedes, Legumes . Can be sown early spring (for winter feed) or again in autumn for later winter early spring feed. The technique is to blanket spray the entire area and ensure that seeding depths are shallow. A light bar harrow pulled over the seeding areas is beneficial. Use fertiliser and see your chemical company specialist with regard to the correct insecticide to use.

Winter Feed Oats . This can be seeded direct into pasture in early autumn. Herbage control can be carried out also if necessary.

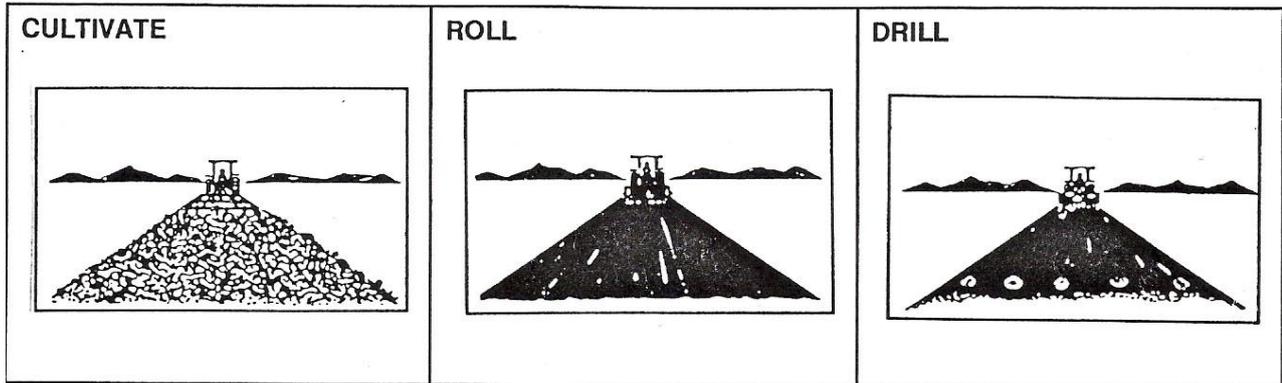
Wheat and Barley . Direct seeding in early spring or autumn depending on variety. Spray out pasture with approved herbicide (may not be necessary after brassica). Always sow with fertiliser.

Lucerne, Alfalfa . Sow in early spring after spraying out entire area with Roundup or Paraquat. It is always a good idea to do a soil test to ensure that the solid pH is satisfactory for plant establishment. Also it is necessary to ensure that the seeds are treated with inoculants to guarantee their germination and nodulation. Use fertiliser and ensure that spraying for insects is carried out . particularly for control of slugs and spring snails.

Green-feed Maize . Carry out in early spring and the same rules apply as with wheat, barley and oats. You may wish to seed in 30 or 45 cm rows and the technique for achieving that is shown under the section **SPECIAL PURPOSE SEEDING** shown later in this booklet.

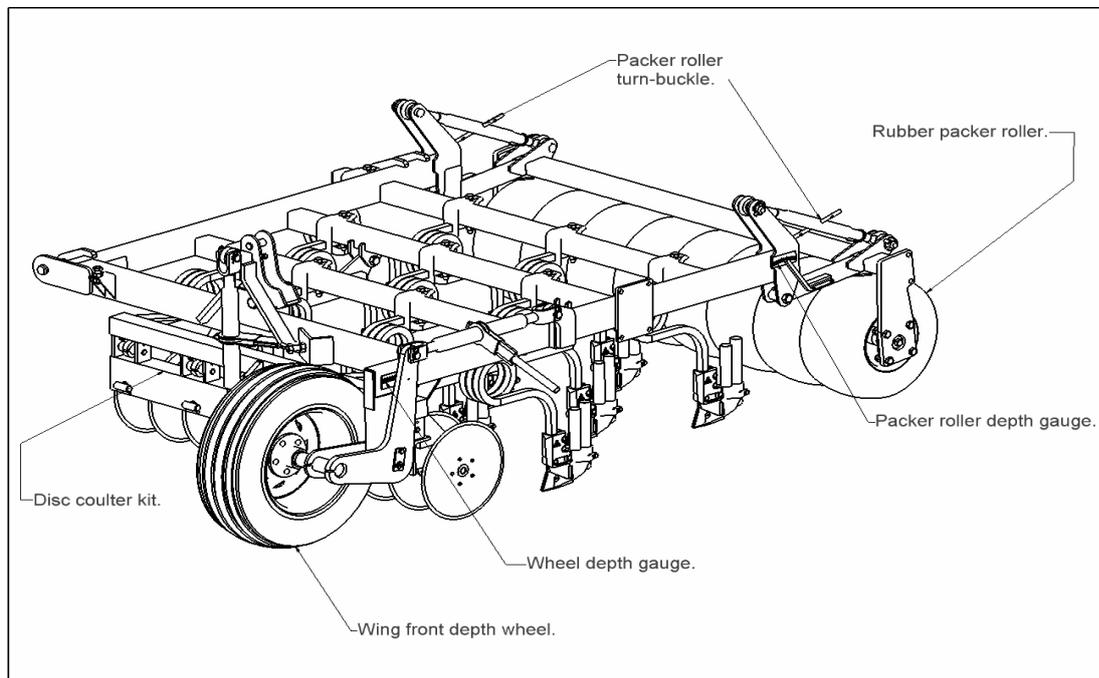
SOWING IN CULTIVATED SOILS

As this is a tined implement with a direct drill type opener, it is important to treat all seed beds as you would a pasture. With a conventional drill one works up the soil into a fine seedbed so that a broad boot type coulter will pass through leaving the seed behind the soil tilth. With the Seedmatic Air-pro, cultivate the soil to destroy existing vegetation but before seeding, roll the seedbed thoroughly and then drill the seeds required into this rolled seedbed. Good germination results will occur.



SEED DEPTH ADJUSTMENT

The seeding depth on the Air-Pro 4132 is controlled by the front row of depth / transport wheels and by the rear packer rollers.
LH WING SHOWN.



FRONT DEPTH WHEELS

Each wing RH/LH has a front **Depth Wheel**; this wheel holds the end of the wing at the desired seeding depth.

To adjust these wheels unlock the depth adjustment ratchet and set to the desired height.

Re-lock the depth adjustment ratchet. **Damage** or changing depth may occur if the ratchets are **not** re-locked.

The transport wheels are also depth wheels, these wheels also need to be set at the same height as the wing depth wheels.

Use the **Depth Gauge**+decals to set all the front wheels at the same height. **Re-lock**.

PACKER ROLLERS

The **Packer Rollers**+do two jobs: they help to cover the seed slots and control the seeding depth.

These Packer Rollers should be set so the depth of the rear row of tines is at the same depth as the front row of tines.

To adjust these rollers loosen the lock tap on the turn-buckles, adjust both turn-buckle in small increments until desired depth is achieved. **Ensure that the turn-buckle handle (Pin) is pointing straight down**, re-tighten lock tap. **Damage** or changing depth may occur if lock taps are **not** re-tightened.

NOTE:

When setting the seeding depth have the disc coulters kits clear of ground.

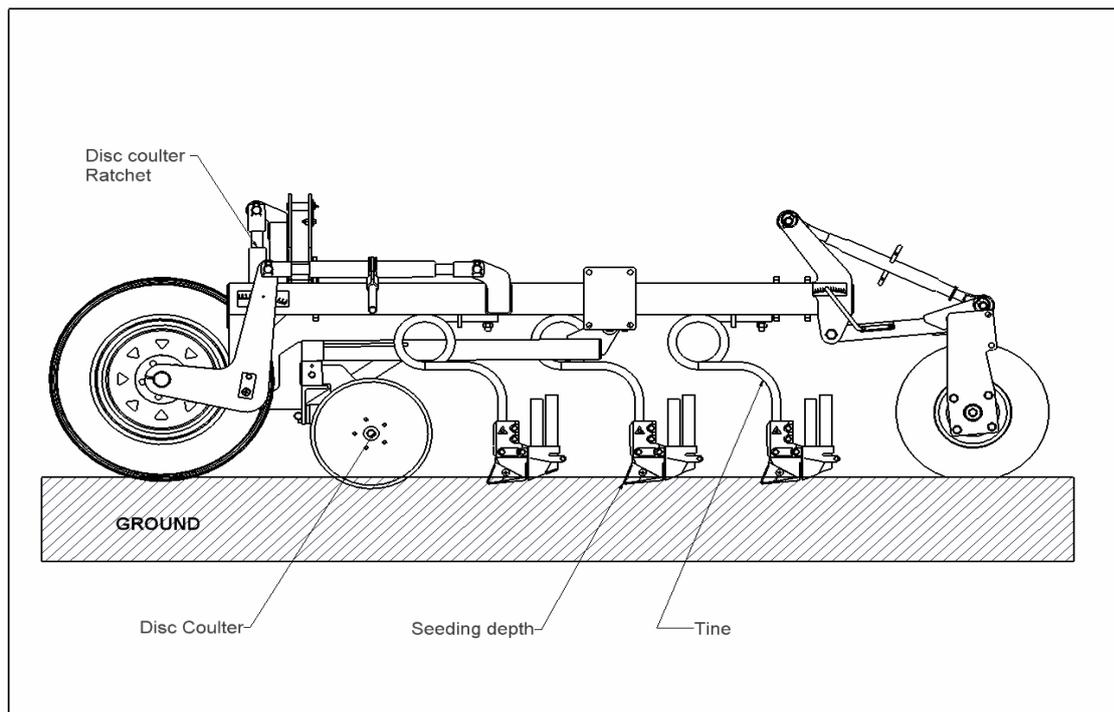
The disc coulters can sometimes interfere with the seeding depth.

DISC COULTERS

The Disc Coulters are designed to cut through the trash/residue that sits on top of the ground into manageable lengths, to allow the tines to pass over this ground with minimum blockages.

The disc coulters can also help cut through the matted root structures to prevent tearing between the tine rows.

SETTING THE DISC COULTER DEPTH



Use the Disc coulters Ratchet to adjust the depth of the Disc Coulters up or down. The disc coulters only need to be at a depth to cut through the top 15-25mm of the ground.

The disc coulters should **not** be set deeper than the seeding depth of the tines, doing this could lead to premature wear of the disc coulters and/or cause the turf to roll up between the disc unit.

HARD GROUND

In very hard ground conditions, if the Disc Coulters are adjusted too deep they can hold up the front row of Tines. This will lead to improper seed placement.

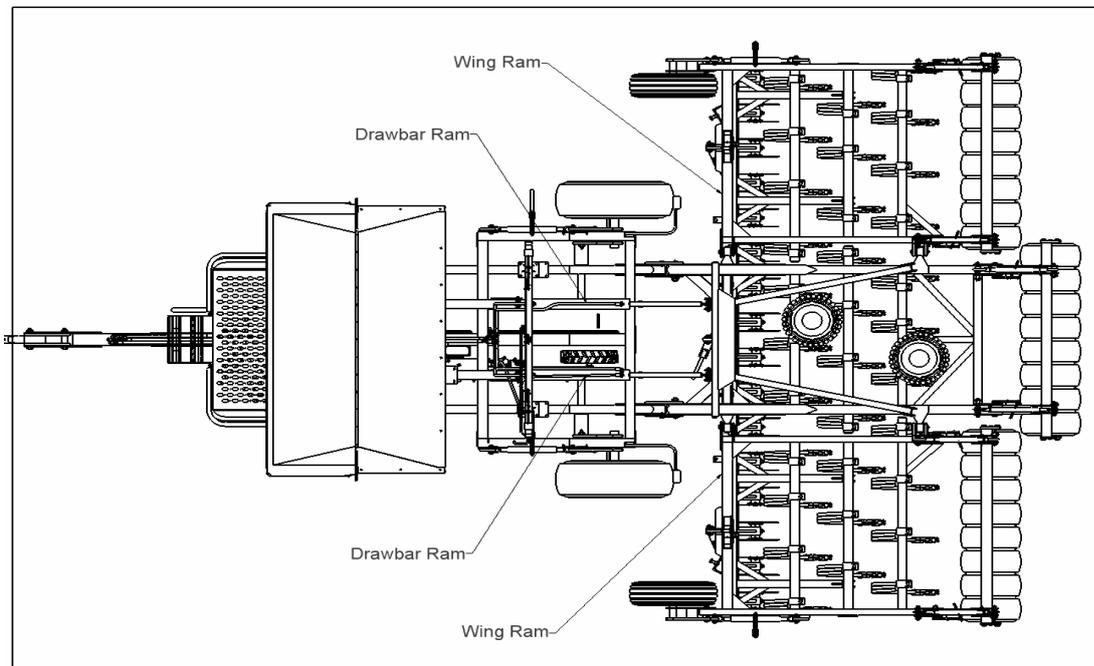
In stony ground the Disc Coulters kit can be adjusted clear of the ground to prevent stone damage to the disc. This will add more weight onto the Tines and aid them to penetrate harder ground conditions.

FOLDING HYDRAULIC SYSTEM

The MK2-4132 is fitted with two separate folding hydraulic systems. One is the Drawbar Rams and the other is the Wing Rams.

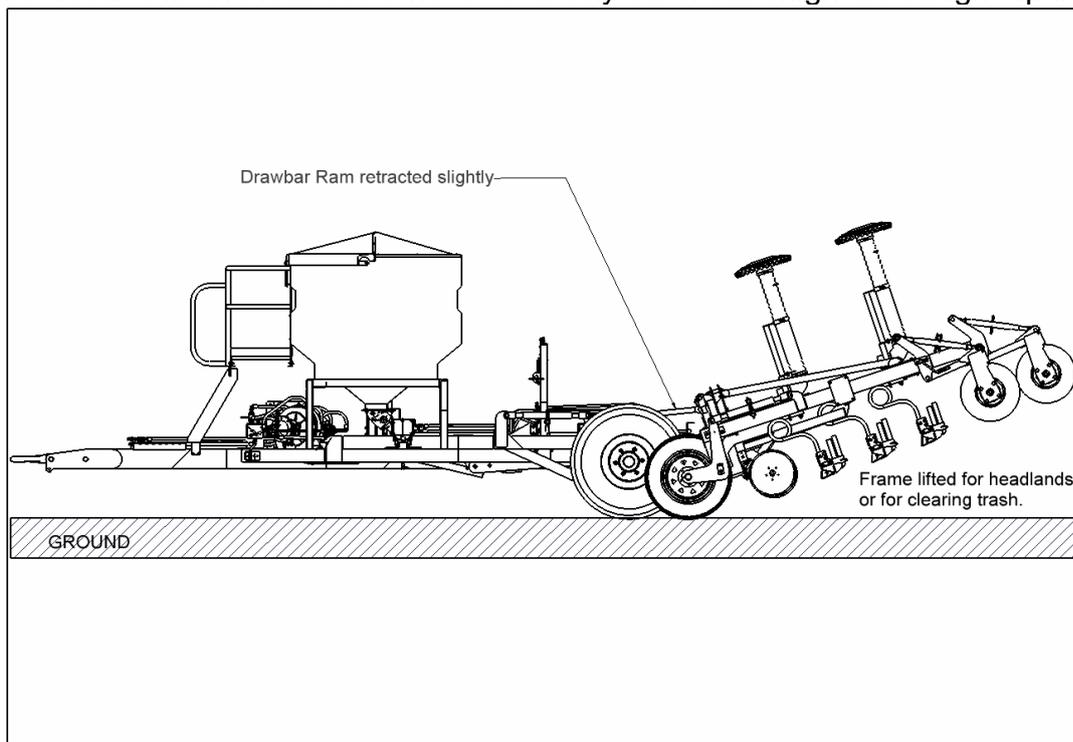
NOTE: Ensure that the MK2-4132 is connected to the tractor's drawbar before folding/unfolding to prevent damage or injury.

HYDRAULIC RAMS



DRAWBAR RAMS

The Drawbar Rams are used to fold/unfold the machine, they are also used to lift the three rear sections clear of the ground in the headlands of the paddocks. They can also be used to lift the rear sections to clear any trash that might be caught up in the tines.

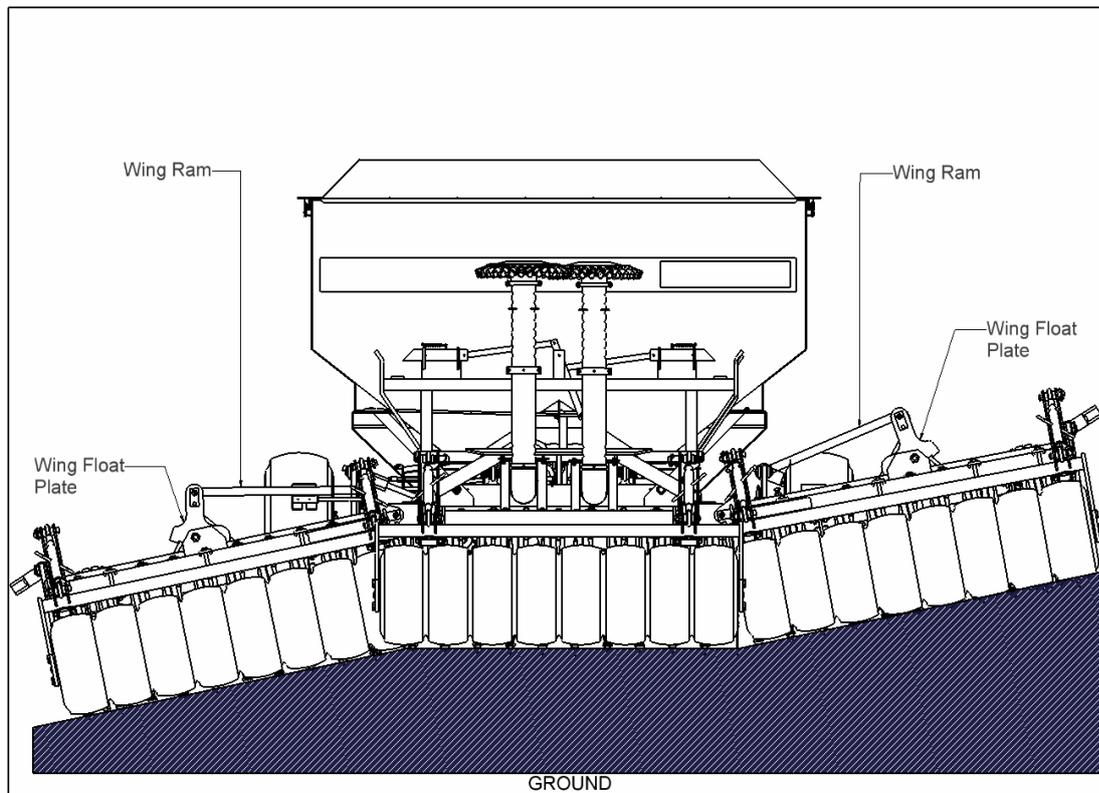


NOTE: When the drill is in work planting seeds the Drawbar Rams should be left in float.

WING RAMS

The wing rams are only used to fold/unfold the machine for transport.

Each ram is fitted with a Wing Float Plate. This plate allows the wings to float over the contours of the ground being sown.



NOTE: When the drill is in work planting seeds the **Wing Rams** should be fully extended, there is no need to leave them in float.

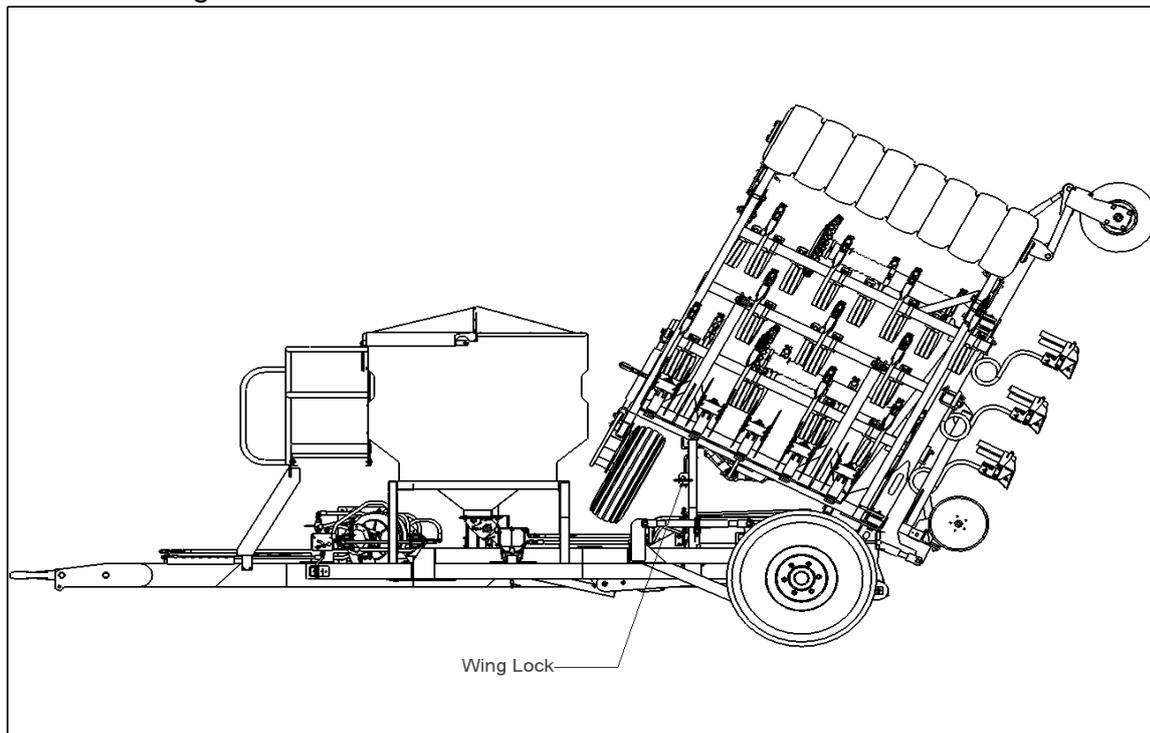
FOLDING & UNFOLDING

When you are about to unfold the MK2-4132 the Wing Lock will need to be pulled outward and locked out. To do this the operator will need to exit the tractor and physically pull out and lock-out the Wing Lock mechanism.

NOTE: Ensure that the MK2-4132 is connected to the tractors drawbar before folding/unfolding to prevent damage or injury.

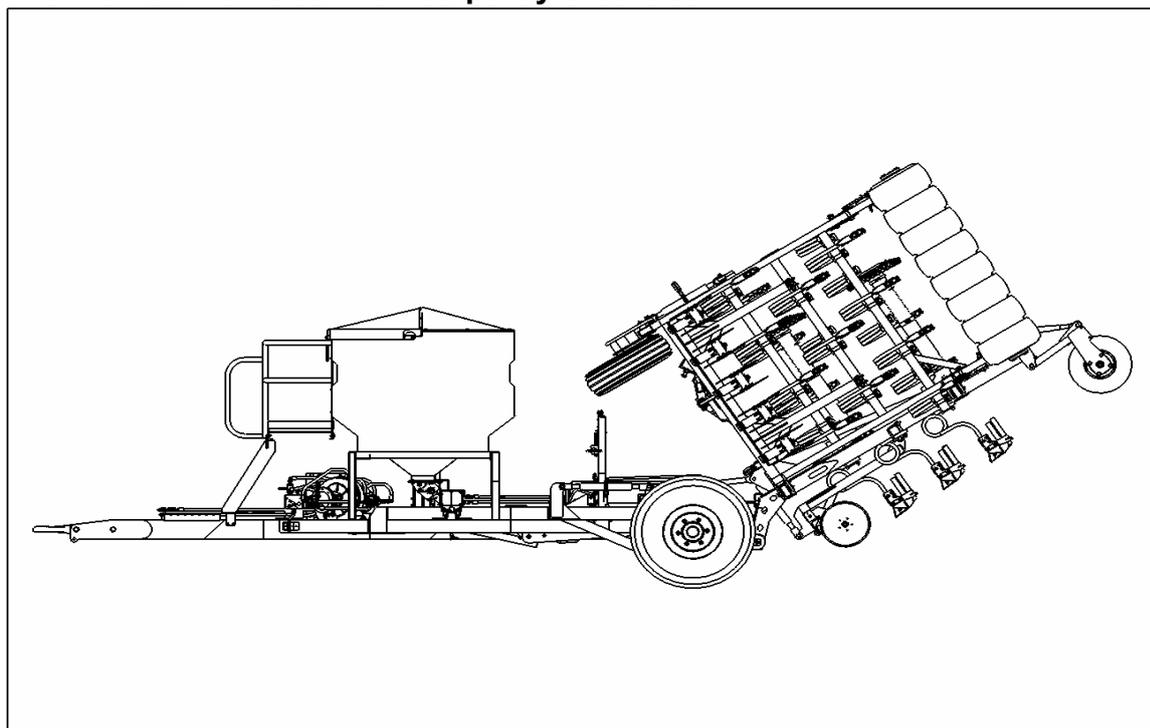
STEP 1. UNLOCK

Lock-out Wing Lock mechanism.



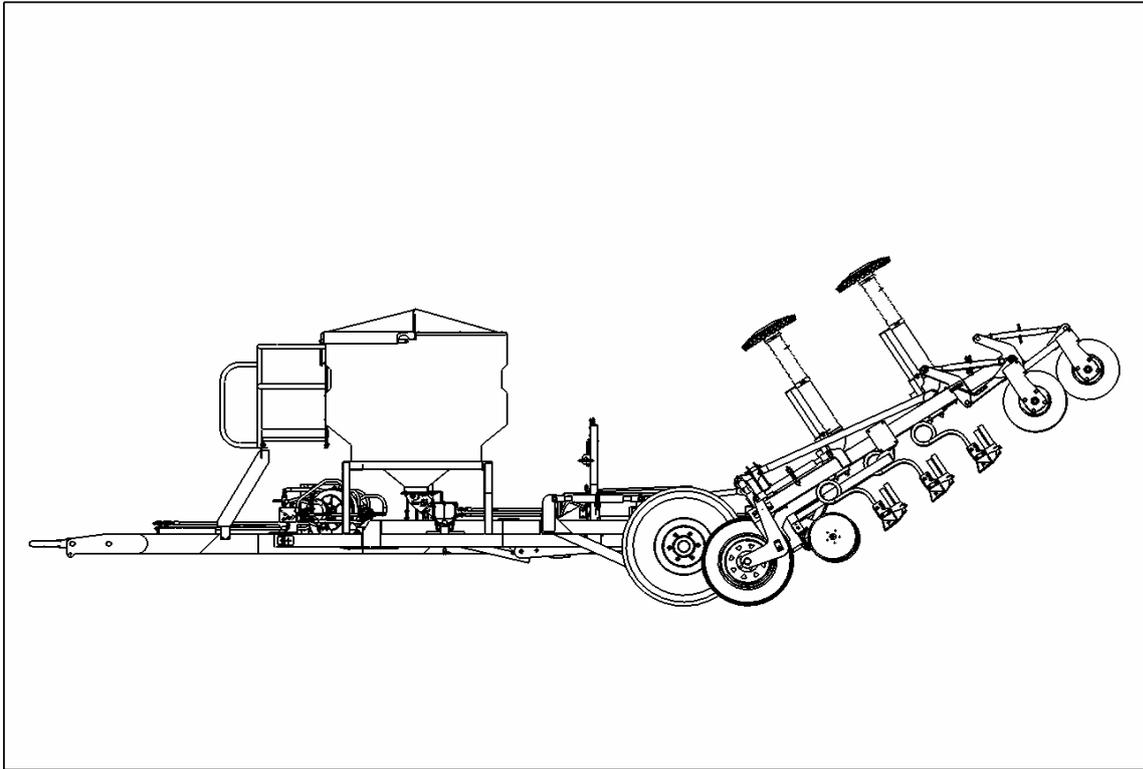
STEP 2. LOWER BACKWARDS

The Drawbar Rams can now be partly extended.



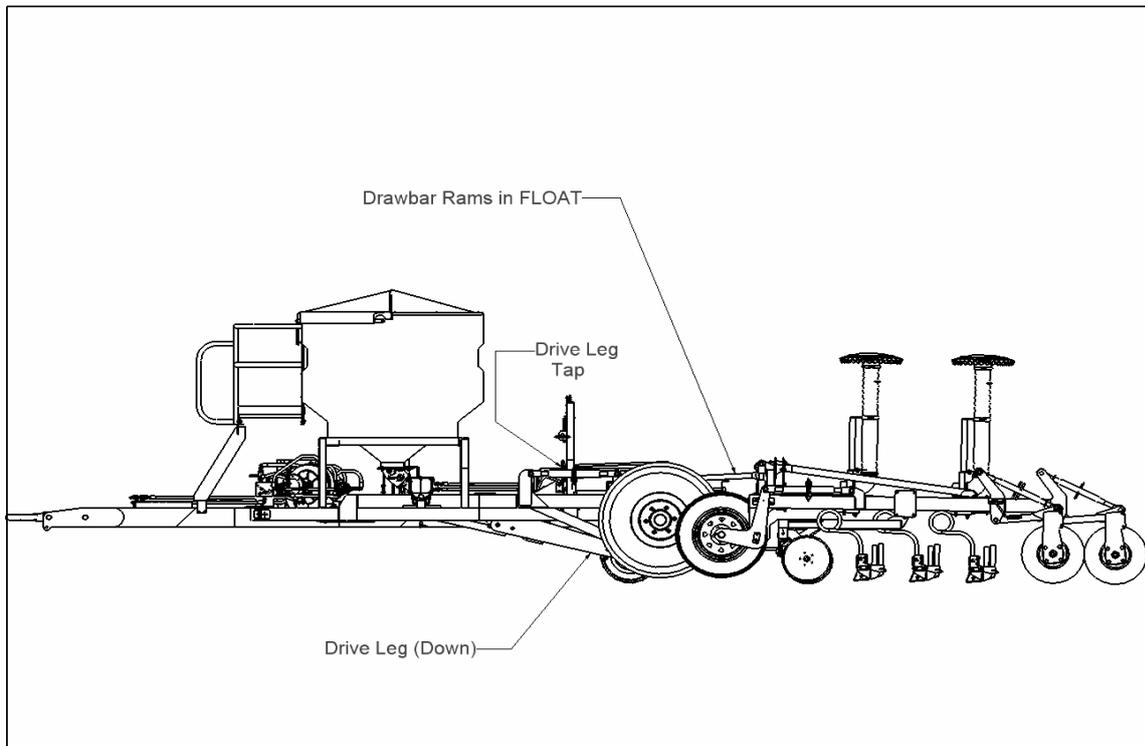
STEP 3. FOLD OUT WINGS

The Wing Rams can now be **completely extended**.



STEP 4. LAY FLAT ON GROUND

The Drawbar Rams extended so the seed drill lays flat on the ground. (**Rams in float**).



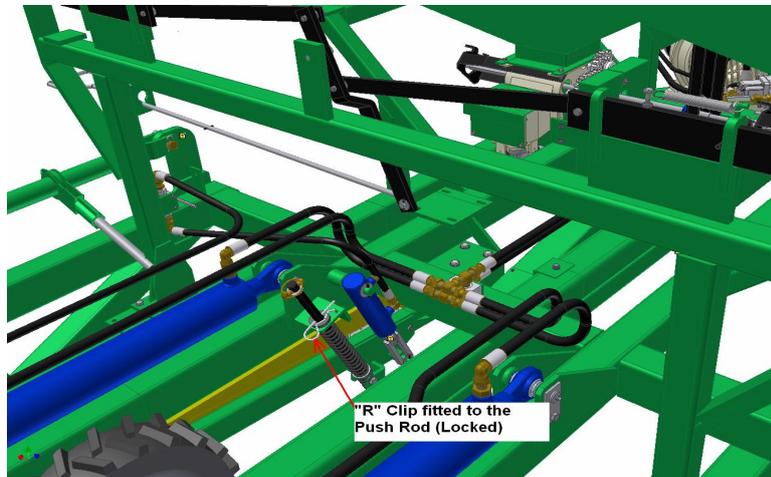
STEP 5. TURN DRIVE WHEEL RAM TAP ON

After the seed drill is lowered flat onto the ground the "R" clip can be removed from the drive leg Push Rod.

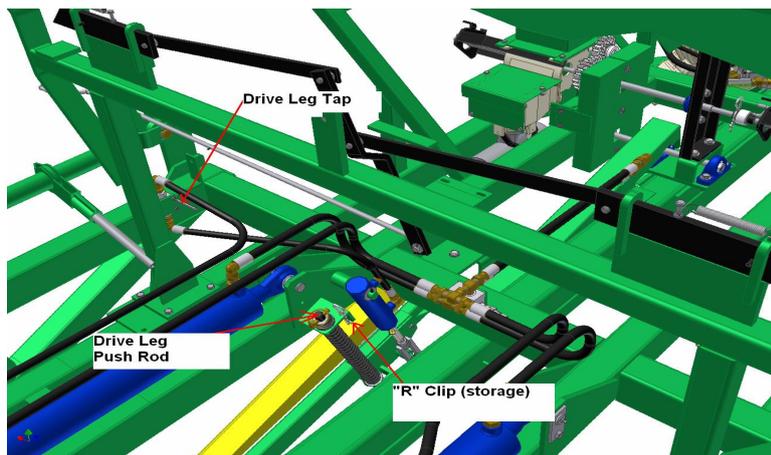
The Drive Wheel Tap can now be **turned ON**, this will engage the drive wheel onto the ground.

This Drive Wheel is the drive/clutch that drives the seed and fertiliser metering units.

Drive Leg Tap & "R" Clip.



Drive Wheel Up (Transport)



Drive Wheel Down (Seeding)

FOLDING UP FOR TRANSPORT

To fold the seed drill up for transport follow steps 4,3,2 & 1.

With the seed drill lifted at the rear **STEP 3**, ensure that the **Drive Wheel is clear of the ground**: the Drive Leg Tap should be turned off and the "R" clip fitted through the drive leg Push Rod. This "R" clip is a second fail-safe device.

The Wing Lock mechanism can also be **unlock** at this stage too.

The Wing Lock will automatically lock when the seed drill is completely folded up/in.

NOTE: If the drive leg is not LOCKED in the UP position while the seed drill is being transported damage may occur.

HYDRAULIC FAN DRIVE

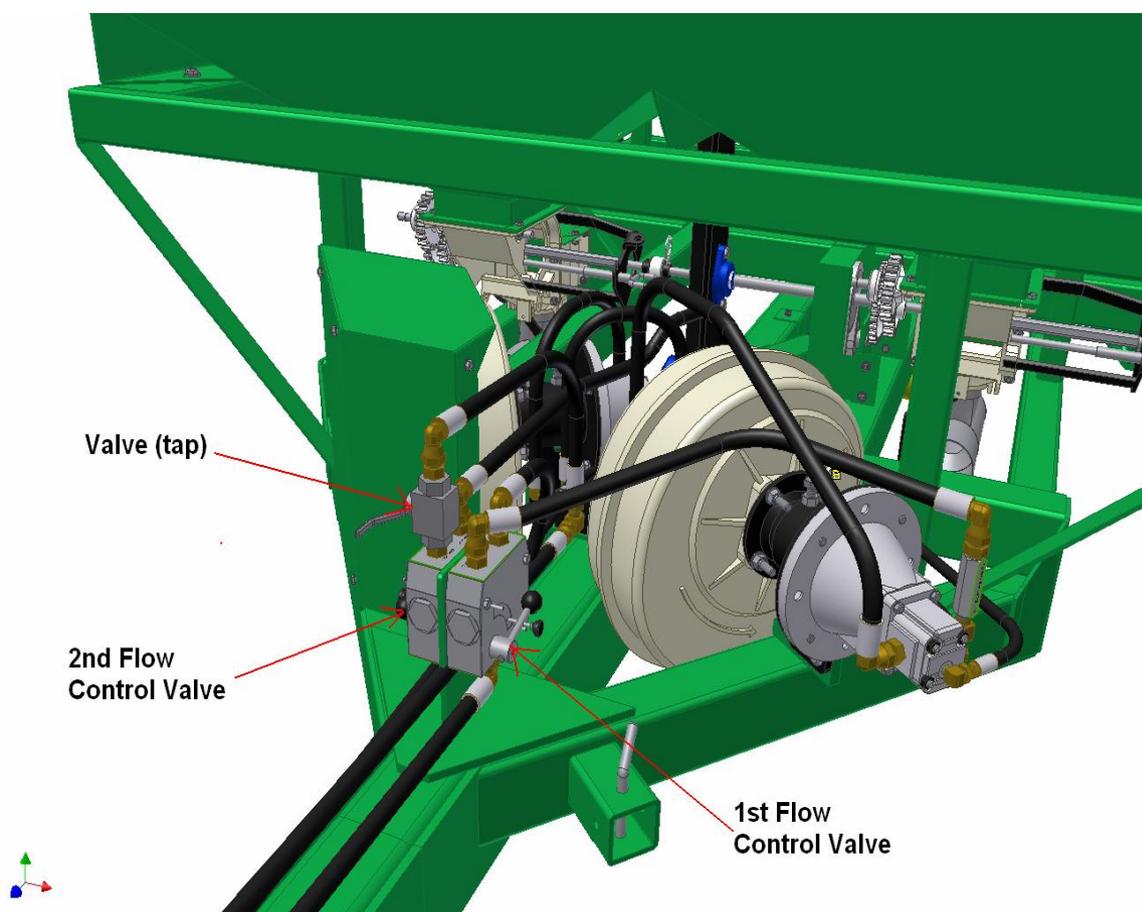
The MK2-4132 has 1 hydraulic fan drive system; this hydraulic system has two hydraulic motors controlled by two flow control valves.

One fan is used to deliver product from the seed hopper and the other fan is used to deliver product from the fertiliser hopper.

The hydraulic motors require 10 to 20 l/m to run and should turn at about 2000 to 4000rpm.

This hydraulic system has been designed to be compatible with either open centre or closed centre hydraulics; this is achieved by having a valve (tap) plumbed into the hydraulic circuit. Have this valve **closed** for **%Closed Centre+** systems or **open** for **%Open Centre+** systems. **This system requires continuous oil flow. One PRIORITY hydraulic bank with the lever locked on, (motor spool) setting. It's very important that the fans maintain a constant speed especially when the seed drill is lifted for the headlands.**

Hydraulic Motors set-up



System overview.

The tractor oil is fed into the 1st Flow Control Valve, some oil is used to drive the SEED fan. The excess oil is then diverted to the 2nd Flow Control Valve, which is used to run the FERTILIZER fan, the oil is then returned back to the tractor.

The **CASE DRAIN** hose (the hose with the female coupling) is used to drain any oil that has sneaked pass the main seals in both hydraulic motors. This CASE DRAIN hose needs to be connected to the tractor oil tank **without any restriction**.

NOTE: If the case drain hose is pressurised or blocked sever **damage will occur**.

SETTING THE HYDRAULIC FAN DRIVE

1. Ensure that the Case drain hose is connected.
2. Ensure you have set the Valve (tap) to match your tractor's hydraulic system. Valve closed for closed centre or valve open for open centre hydraulics.
3. Ensure that the hydraulic feed and return hoses are connected to the priority hydraulic bank on the tractor and this bank spool is set to **motor setting**.
4. Ensure that the RPM monitors are on.

NOTE:

This hydraulic system has two flow restrictor valves built into it; these valves restrict the amount of oil that can be pumped through the system. This protects the hydraulic motors from over revving.

If the fan motors don't start up slow the flow of oil down from the tractor.

FIRST INITIAL SETUP.

Close the 2nd Flow Control Valve (lever up) and have the 1st Flow Control Valve half open.

With oil flowing adjust the 1st Flow Control Valve until you have your desired fan RPM (2800) for most smaller seeds. Lock valve lever in place with thumbscrew.

With oil flowing now open and adjust the 2nd Flow Control Valve until you have your desired fan RPM (3400) for most fertilizers. Lock valve lever in place with thumbscrew.

Now check that both fans are operating at their desired RPM, if not readjust Flow Control Valves until this is achieved.

After the fan speed have been set to their desired speeds, the tractor's oil flow can be adjusted so it delivers **JUST** enough oil to keep both fans at their set speeds.

This will ensure that the tractor has enough oil left over to run all the other hydraulic systems on the drill.

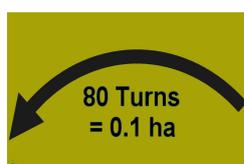
CALIBRATION

The MK2-4132 is fitted with two adjustable fluted rollers; these fluted rollers gauge the amount of seed/fertiliser that is to be dispensed into the airstream.

NOTE: Only clean dry granulated fertiliser products should be used:
Using inferior products may result in blockages and failure of the Fluted Rollers.

SEED & FERTILISER RATES

SEED TYPE	WHEAT	BARLEY	OATS	BEANS	GRASS	PHOSPHATE	
	(kg/litre)	0.77	0.68	0.50	0.85	0.36	1.20
	kg/ha	kg/ha	kg/ha	kg/ha	kg/ha	kg/ha	
SCALE: STANDARD SOWING "A"	10	16	14	20	22	40	
	15	36	30	34	39	17	61
	20	53	44	48	57	24	81
	25	69	57	62	74	32	104
	30	85	72	75	92	39	128
	35	100	82	89	109	47	150
	40	114	93	102	127		175
	45	130	106	116	145		200
	50	144	118	129	162		
	55	160	133	140	178		
	60	175	145	154	197		
	65	190	157	167	214		
	70	205	170	180	231		
	75	221	182	196	249		
	80	237	195	207	266		
	85	251	208	219	284		
	90	267	220	232	301		
95	282	234	245	318			
100	298	246	256	335			
105	314	260	270	352			
110	330	273	282	370			



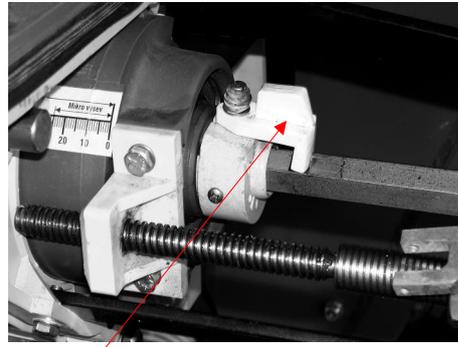
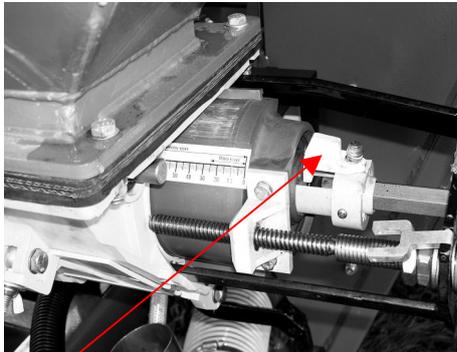
FINE SEEDS

SCALE: Fine seeds "Z"		RAPE	GRASS
		Kg/ha	Kg/ha
2.5	1.7		
5	4.3		
7.5	6.4	2.6	
10	8.5	4.9	
12.5	10.7	6.8	
15	12.9	8.6	
17.5	15.0	10.5	
20	17.1	12.4	
22.5	19.3	14.1	
25	21.5	15.2	

FINE SEED SETTING

Each fluted roller-metering unit has a FINE SEEDS setting; this fine seed setting is used for the metering of fine seeds or granules at low rates.

The fine seed lever works on from 0 to 25 on the fine seed scale $\%Z+$; if higher rates than this are needed the fine seeds lever needs to be locked out and the STANDARD SOWING SCALE $\%A+$ used.



Fine seeds lever locked out (scale $\%A+$).
For sowing most seeds from 15kg/ha up.

Fine seeds lever locked (scale $\%Z+$).
0 < 25 only. Adjustments over 25 with lever lock will result in **damage**.

CALIBRATION OF SEED & FERTILISER

1. Ensure that the $\%DRIVE WHEEL+$ is clear of the ground.
If not use the drawbar ram system to disengage the wheel.
2. Place Seed/Fertiliser in hopper.
3. Remove $\%Venturi+$ from bottom of metering unit.
4. Turn Crank Handle to prime system. Discard product.
5. Turn Crank Handle 80, 40, 20 or 10 turns.
Choose the amount of turns that meters enough product that can be weighed accurately.
6. Weigh metered product in grams. = (Weight)

80 turns of crank handle;	(weight)	-:- 100 = kg/ha.
40 turns of crank handle;	(weight) x 2	-:- 100 = kg/ha.
20 turns of crank handle;	(weight) x 4	-:- 100 = kg/ha.
10 turns of crank handle;	(weight) x 8	-:- 100 = kg/ha.

Crank handle.



NOTE: The fans should not be running during calibration.

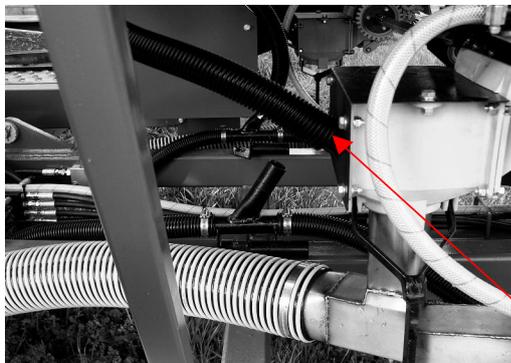
SMALL SEEDS BOX

Most MK2-4132 are fitted with a small seeds box; this small seeds box is fitted to the rear of the main hopper. This small seeds box is used to apply small seeds or slug bates at independent rates.

This small seeds box has a variable speed gearbox to control its metering rates.

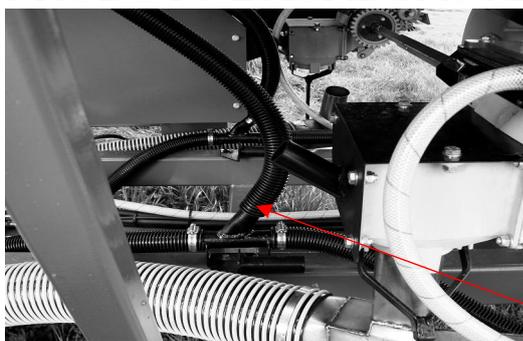
Product metered from this box can be placed down the main airstream or broadcast at the rear of the seed drill.

PRODUCT DOWN MAIN AIRSTREAM



Delivery hose attached here for product down the main airstream.

PRODUCT BROADCASTED



Delivery hose attached here for product broadcasting.

SMALL SEEDS BOX CALIBRATION

The small seeds box is calibrated in the same manner as the main hopper.

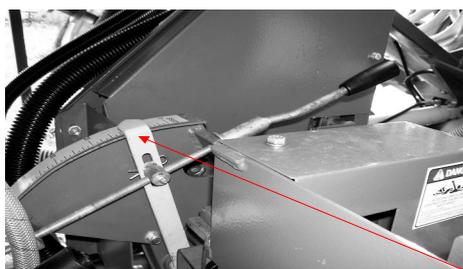
Unplug the bottom end of the **two seed tubes** from either main air stream or broadcast venturi and place **both** in container to catch metered product.

Turn crank handle the required amount of turns; 80, 40, 20 or 10.

Weigh product;

Divide by the appropriate numbers. (see %CALIBRATION OF SEED & FERTILISER+).

If rates need to be increased/decreased adjust the variable speed gearbox. (Scale 1<40.)



Scale 1<40.

GENERAL MAINTENANCE

LUBRICATION

The variable speed gearbox should be kept filled to the sight glass, though top-ups should seldom be necessary. The oils recommended are: BP VANELLUS DD50, GR-XP 46, MOBIL, DTE 25, SHELL, DONAX TM or equivalent.

NOTE: DO NOT USE A HYPOID TYPE OF OIL. Damage will occur.

Machines Grease Points:

Machine Grease Points:	No. Of Nipples	Greasing Regularity
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Disc Coulter Kits:

Disc Coulter Pod	1 per pod	10 hours
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Frame:

Depth Leg Pivots	1 per leg	40 hours
Drawbar Main Pivots	2 per unit	10 hours
Wing Main Pivots	2 per unit	10 hours
Ram end Pins	2 per ram	10 hours
Rear Roller Axle	2 per axle	10 hours

Drive System:

Drive Leg Top Shaft	1 per machine	40 hours
Bottom Lay Shaft	2 per shaft	40 hours
Top Lay Shaft	1 per Shaft	40 hours
Metering Units	1 per Unit	40 hours

Keep threads corrosion free by periodically coating with a copper coating (grease tends to attract dust)

- Disc Coulter Ratchet Threads
- Depth Control Ratchet Threads



Greasing location points are labelled on the drill with the grease sticker (shown above). Some greasing points are shown in the above figures. Chains should be kept lubricated and should be removed at least once each season and thoroughly cleaned in diesel.

SEASONAL STORAGE

The drill should be thoroughly cleaned and lubricated.

The drill should be stored out of the weather and in an unfolded state; this will ensure that no water gets into the air system.

Look for any unusual wear and remedy the cause. If this requires parts it is best to order them well in advance of the next sowing season. Check all nuts and bolts for tightness.

- Ensure there is absolutely no seed left in the hopper.
- Ensure there is absolutely no fertiliser left in the hopper.
- Check all tine bolts
- Replace any damaged replaceable points
- Check all hydraulic fittings.

BLADE MAINTENANCE

("Replaceable Point")

When purchasing the Seedmatic Pro MK2-4132 drill it is supplied with a replaceable point. This point is a cast Ni-Hard tip, with a tungsten insert fixed to the leading edge. The replaceable point is constructed from Ni-Hard, which is a special nickel chromium alloy with an overall Rockwell Hardness of over 60. It is like making the whole opener from hard facing rod which has a similar Rockwell hardness.

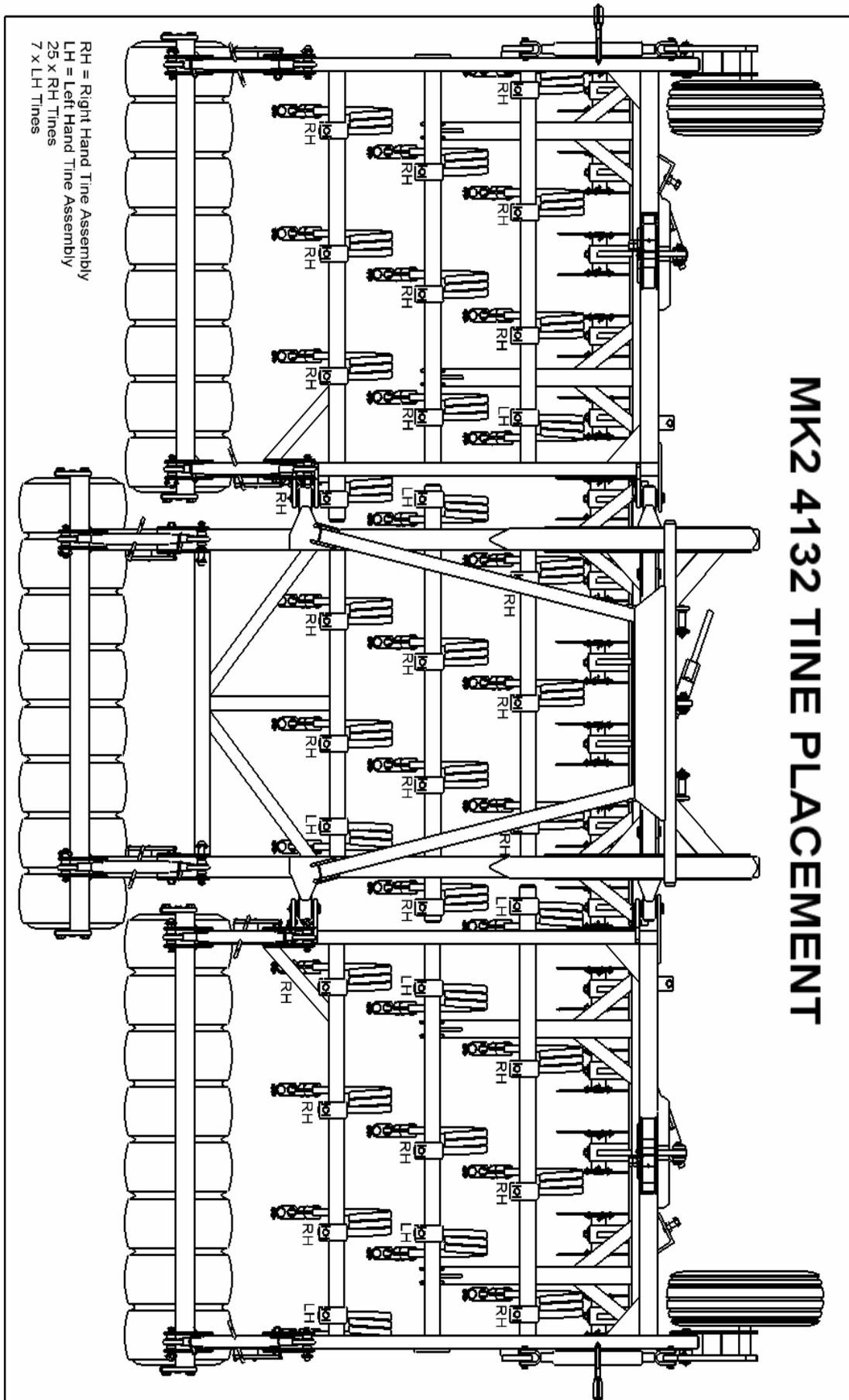
It is not recommended to attempt to hard face this part as it wears, as sectional cracking will occur. The Tungsten Carbide insert which is fitted to the front of the point when purchased, was applied using a special preheat control technique. It is therefore recommended that should the Tungsten Carbide insert become dislodged the point be replaced.

TUNGSTEN CARBIDE INSERT

The tungsten carbide insert that is fitted to the Aitchison knock-on/knock-off Replaceable Point is the hardest man-made alloy known to man. Being extremely hard it is also brittle. It is not possible to have a tungsten that is super resistant to impact and ultra-wear resistant. We have chosen a grade somewhere down the middle that gives us an acceptable impact resistance. However, should you be working in stones, there is every possibility that some of the inserts may fracture and if this happens the point of the blade will wear excessively. Watch for fractures and replace if this happens.

NOTE: There are two options of Replaceable Points, one fitted with a one-piece insert and the other having a sprayed tungsten face. If you are working in very stony conditions the Replaceable Point with the sprayed tungsten face would be your best option. Contact your local Aitchison dealer for further information regarding these parts. There is no warranty of wear parts. This includes tungsten carbide due to the very uncompromising nature of the job it is being asked to do.

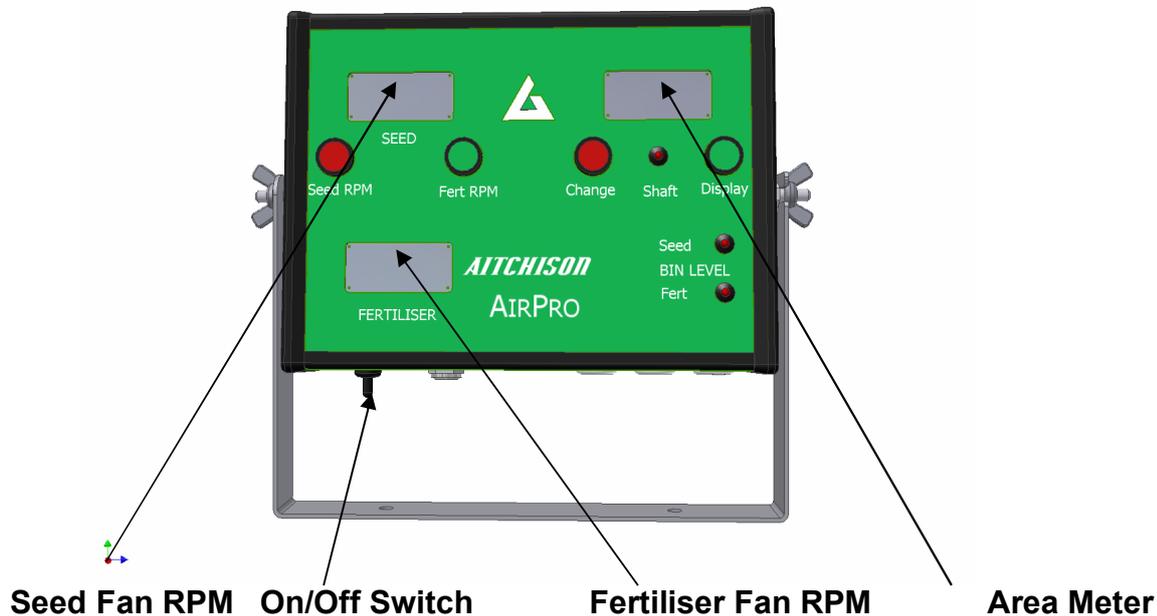
MK2 4132 TINE PLACEMENT



MK2 4132 TINE PLACEMENT

HECTARE METER

The MK2-4132 should be fitted with an Aitchison AirPro hectare meter; this unit can monitor both Fans RPM, calculate area sown and alert the operator when the seed and fertiliser bins are empty.



This unit has built in alarms:

1. Low Seed fan RPM.
2. Low Fertiliser fan RPM.
3. Shaft stoped.
4. Bin empty.

Installation

Mount the control box within the cab so that the display can be easily seen. Position using the supplied bracket and the side mount M6 bolt fixings.

With the control switched off run the power cable to a suitable 12-volt dc power source. (Cigarette Plug) This must have permanent power and not be switched through the ignition or data may be lost at power off. Brown or red core for positive and blue or black for negative. The control is reverse polarity protected.

The unit stores all relevant information at switch off.

Two panel buttons allow for all adjustments of the functions on the large display screens.

Circumference and Width measurements.

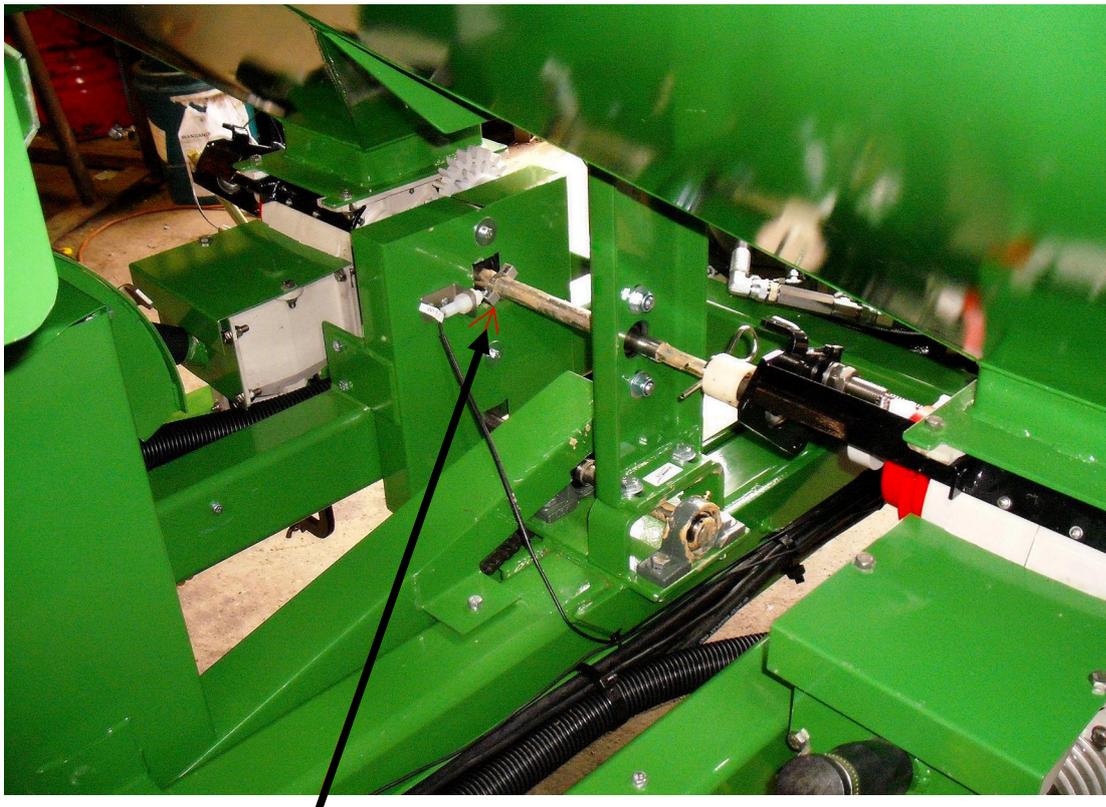
In the start up procedure the control allows for the input of the wheel circumference and the width of the machine.

Circumference, The measurement required is actually the distance the machine moves between each pass of the sensor and magnets.

The MK2 4132 AirPro is fitted with two ground speed magnets; fitted to the hopper drive shaft, this ensures a more accurate circumference input.

1. Mark the ground with a reference point to the machine.
2. Drive in a straight line with a second person counting the number of Hopper drive shaft turns. Stop at ten turns precisely.
3. Measure the distance travelled & divide by twenty.
4. Keep a record of this value for future reference.

**Circumference input is: 2.52-one magnet, 1.26-for two magnets.
Width is input as span of the machine, 4.8m.**



Hopper drive shaft fitted with two magnets.

Used for Circumference input.

Drive Leg fitted with Headland Sensor & Magnet.



Headland Sensor

Headland Magnet

This Sensor switches on/off the Area Meter in the headlands, and disables the Shaft Stop alarm. When the Drive Leg is lifted clear of the ground the Magnet trips the Sensor.

Setting the Seed and Fertiliser Fan low speed Alarm.

With the %Seed RPM+button held down; turn on the monitor, keep pressing up and down on the Seed RPM button until the unit has counted up the your desired alarm figure. ie. **2500** this should be fine for small light seeds.

Note: you only have a second to make adjustments, after this the monitor will switch to running mode and you will be unable to make further adjustments; Tun the unit off and restart if you need to make further adjustments. The monitor will store these settings in its memory.

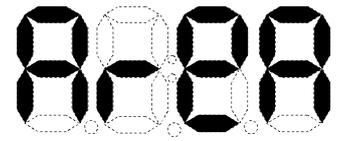
For big seeds or/and for high sowing rates the seed fan speed will need to be increased. When doing this, the Low Seed RPM alarm should be reset to a higher figure.

The %Fertiliser RPM+low speed alarm is set in the same manner as the Seed RPM alarm. We suggest that this alarm be set about **2800**. High rates of fertiliser my need the fan to run at higher RPM; re-adjust the low speed alarm if doing this

Start-Up

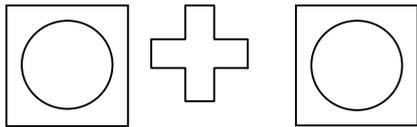
After power on the control displays Area for 2 seconds.
During this time the control performs its own self tests.

During this period it is also possible for the user to switch to Options mode.



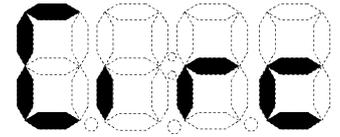
CHANGE

DISPLAY



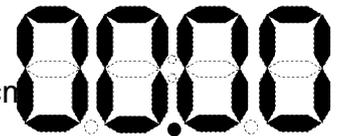
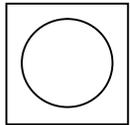
Pressing Change and Display buttons at the same time, whilst the control is in the initial test mode enters the option change mode.

Initially Circ for Circumference is displayed for 2 seconds



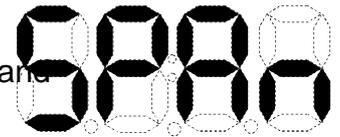
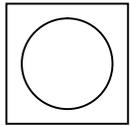
CHANGE

Press change to increase the circumference to the value required. Note the maximum circumference is 5.12 metres, always displayed in meters ie 5m12cm. Press and hold will increment automatically.



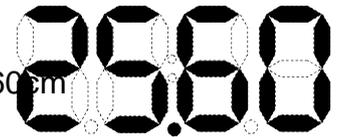
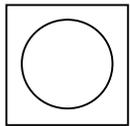
DISPLAY

Press display once to store the new circumference and Move on to input the span of the machine.



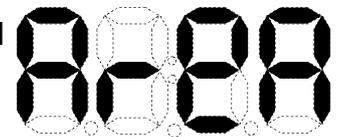
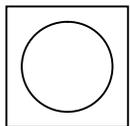
CHANGE

Press change to increase the machine span to the value required. Note the maximum machine width is 25.6 meters, always displayed in meters ie. 25m60cm. Press and hold will increment automatically.



DISPLAY

Press display once to store the new span value and Move on to the operational mode.



Operational Mode

After the initial 2 second display of area the control will always switch to display the identifier for the last Mode i.e. if switched off in distance then on in distance.

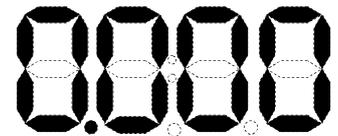
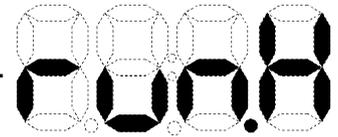
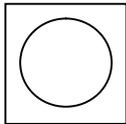
There are seven displayed modes of operation. These are swapped sequentially with each press of the display button. Holding the button displays a character sequence as an identifier. Press and hold the change button to reset the area and distance counts.

Running Hectare and Acre Display

Displays an accurate running Hectare Area covered.
The smallest denomination displayed is 0.001 Hectares ie 10 m².

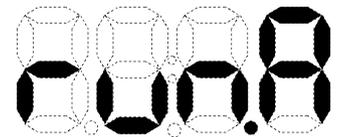
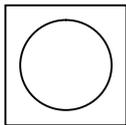
CHANGE

Press and hold change to clear the running Area store.
Note this also clears the running Acre display



DISPLAY

Press display once to convert to show in Acres.

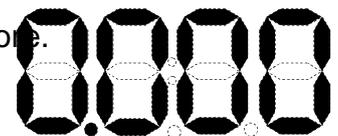
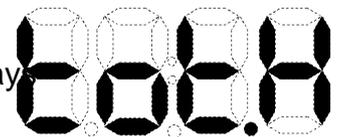
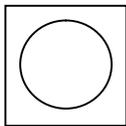


Total Hectare and Acre Display

Press Display again to change to the total or machine area display.
This displays an accurate running Hectare Area covered.
The smallest denomination displayed is 0.001 Hectares ie 10 m².

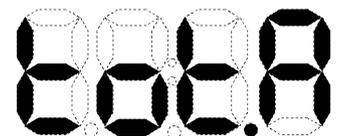
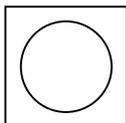
CHANGE

Press and hold change to clear the running Area store.
Note this also clears the running Acre display



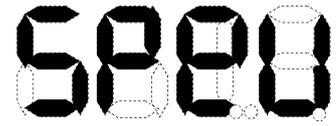
DISPLAY

Press display once to convert to show in Acres.



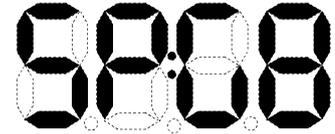
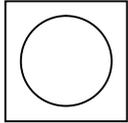
Two Speed Displays

Press Display again to change to the speed display.
This displays an accurate running ground speed.

A digital display showing the number 58.00 in a seven-segment font. The decimal point is located between the second and third digits.

Initially displays SP:EU for european measurements and displays
Ground speed in Km per hour

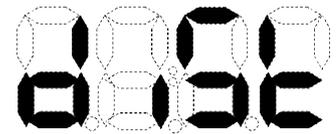
DISPLAY Press display once to convert to show in Miles/hour.
Initial shown by SP:GB

A digital display showing the number 99.00 in a seven-segment font. The decimal point is located between the second and third digits.

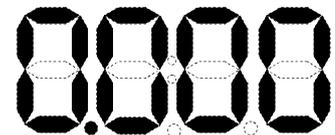
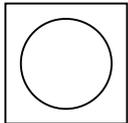
Speed Display is updated every 2 seconds.
If there are no pulses for 10 seconds then the display will clear.

Display Distance in Kilometers and Meters.

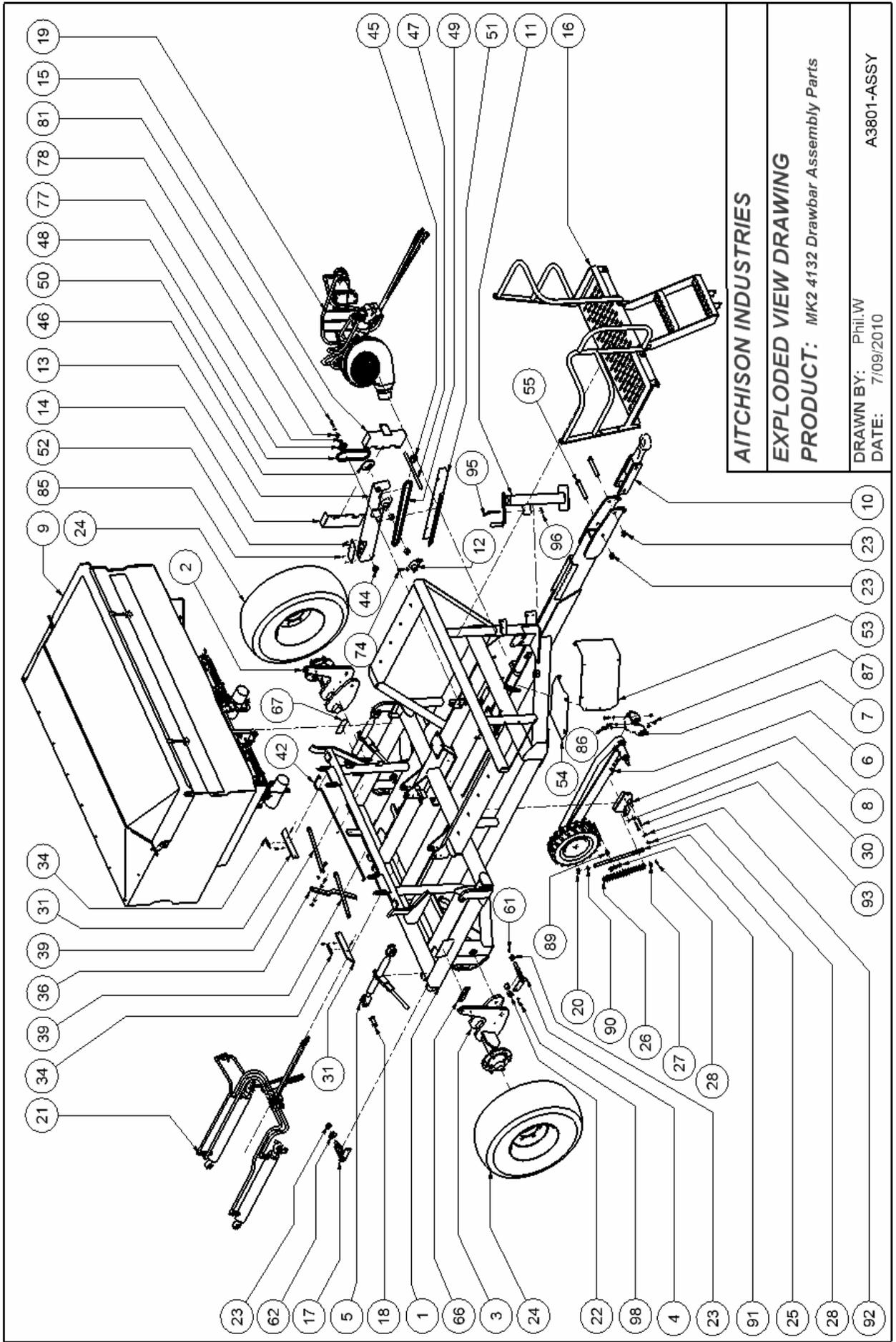
Press Display again to change to show Distance
This displays an accurate running Distance covered.
The smallest denomination displayed is 0.001 Kms or 1 m.

A digital display showing the number 0.000 in a seven-segment font. The decimal point is located between the first and second digits.

DISPLAY Press and hold change to clear the Distance store.

A digital display showing the number 00.00 in a seven-segment font. The decimal point is located between the second and third digits.

Press display again to revert to running area.



AITCHISON INDUSTRIES

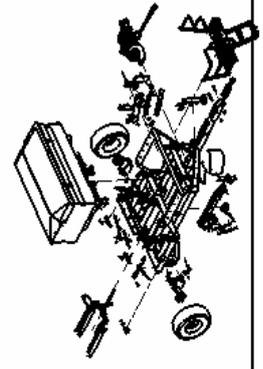
EXPLODED VIEW DRAWING

PRODUCT: MK2 4132 Drawbar Assembly Parts

DRAWN BY: Phil.W
DATE: 7/09/2010

A3801-ASSY

Parts List			Parts List			Parts List					
ITE	QT	DESCRIPTION	PART NUMBE	ITE	QT	DESCRIPTION	PART NUMBE	ITE	QT	DESCRIPTION	PART NUMBE
1	1	MK2 Drawbar Assembly	A3801	33	2	M6x30 Bolt	8212H	67	1	Decal - Depth Gauge LH	D3502
2	1	MK2 Drawbar Depth Leg Assembly LH	A3802L	34	2	Gearbox Spring	A23104	68	11	6mm Fender Washer	9022
3	1	MK2 Drawbar Depth Leg Assembly RH	A3802R	35	3	6 x 30 Roll Pin	9250	69	7	6mm Flat Washer	9023
4	2	MK2 Drawbar Depth Leg Pin Assembly	A3803	36	1	MK2 Drawbar Lock Pivot Arm	A3817	70	13	6mm Spring Washer	9021
5	2	Ratchet Link	A23127	37	5	12mm Flat Washer	9051	71	11	M6 x 16 Bolt	8208H
6	1	Complete Drive Leg Assembly	A3828	38	5	M10 Nut	9141	72	2	M6x20 Bolt	8205H
7	1	GF Drive Leg Mount Assembly	A28067	39	2	MK2 Drawbar Lock Pivot Link	A3818	73	8	12mm HD Flat Washer	9053
8	1	MK2 Drive Leg Lift Bracket Assembly	A3804	40	4	M10 x 30 Bolt	8415H	74	4	M 12 x 50 Bolt	8502H
9	1	MK2 4132 Hopper Complete Assembly	A3830-ASSY	41	1	M12 x 35 Bolt	8510H	75	6	12mm Spring Washer	9052
10	1	Tow Eye Assembly	A3516	42	1	MK2 Drawbar Wing Lock Handle	A3819	76	2	6 x 50 Roll Pin	9262
11	1	5000kg Adjustable Stand.	A3500-10	43	2	3 x 20 Roll Pin	9267	77	1	6200 Bearing	9219
12	2	P204 Bearing & Housing	9221/9228	44	1	11T Sprocket Half Inch Pitch	A28012	78	1	MK2 Tensioner Spacer	A3826
13	1	MK2 DL to LS Cover Assembly	A3805	45	1	15T Sprocket Half Inch Pitch	A28010	79	2	10 mm Flat Washer	9042
14	1	MK2 LS to MU Cover Assembly	A3806	46	1	27T Sprocket Half Inch Pitch	A2322-01	80	1	10mm HD Flat Washer	9040
15	1	MK2 LS to MU Front Cover Assembly	A3807	47	1	MK2 Drive Lower Lay Shaft	A3820	81	1	M10 x 45 Bolt	8404H
16	1	MK2 Front Treadboard Assembly	A3808-ASSY	48	1	17T Plate Sprocket Tensioner	A2350-01	82	6	M8 x 20 Bolt	8311H
17	2	MK2 Drawbar Main Pivot Pin Assembly	A3809	49	1	MK2 Drive Chain DL to LS @ 1590mm	A3801CH-01	83	6	8mm Spring Washer	9030
18	4	Ratchet Link Pin & Clips	A2646/A2647	50	1	MK2 Drive Chain LS to MU @ 710mm	A3801CH-02	84	4	M8 Nut	9106
19	1	Fan Hydraulic System	A3810-ASSY	51	1	MK2 DL to LS Cover Bottom	A3821	85	4	Screw 10g x Half inch ZP Pan Pozi	8903
20	1	11mm Lynch Pin	9288	52	1	MK2 DL to LS Cover Top	A3822	86	5	M12 x 40 Bolt	8503H
21	1	Main Lift Hydraulic System	A3812-ASSY	53	1	MK2 Fan Cover Face	A3823	87	5	M 12 Nylock Nut	9151
22	4	FMB 3026DU	A3720-40	54	1	MK2 Fan Cover Top	A3824	88	2	8mm Flat Washer	9031
23	6	M24 Nylock Nut	9198	55	2	Drawbar Tow Eye Bolt	A3700-53	89	1	Drag Arm Push Rod Bush	A23211-01
24	2	12.5 - 80 - 15.3 AW Wheel	A3813	56	2	Main Hose Clamp Plate	A3592-01	90	1	20mm x 3 Flat Washer	9070
25	1	MK2 Drive Leg Push Rod	A3814	57	4	M8 x 35 Bolt	8310H	91	1	5mm R Clip	9289
26	1	3000 Dragarm Spring	A23210	58	4	M8 Nylock Nut	9105	92	1	16mm ZP Washer	9063
27	1	MK2 Drive Leg Spring Retainer	A3815	59	1	10mm Spring Washer	9041	93	2	M8 x 70 Bolt	8320H
28	2	6 x 40 Roll Pin	9251	61	2	M6 Grease Nipple 90 Degree	9325	95	1	Roller Lock Pin	A3560-01
30	6	M12 Nut	9152	62	2	MK2 Drawbar Main Pivot Washer	A3825	96	1	R Clip 3mm	9280
31	2	MK2 Drawbar Wing Lock Slide	A3816	63	2	M6 Stright Grease Nipple	9323	97	1	M12 x 55 Bolt	8512H
32	7	M6 Nut	9121	66	1	Decal - Depth Gauge RH	D3503	98	2	M12 x 25 Bolt	8527H
								99	1	MK2 Crank Handle	A3827



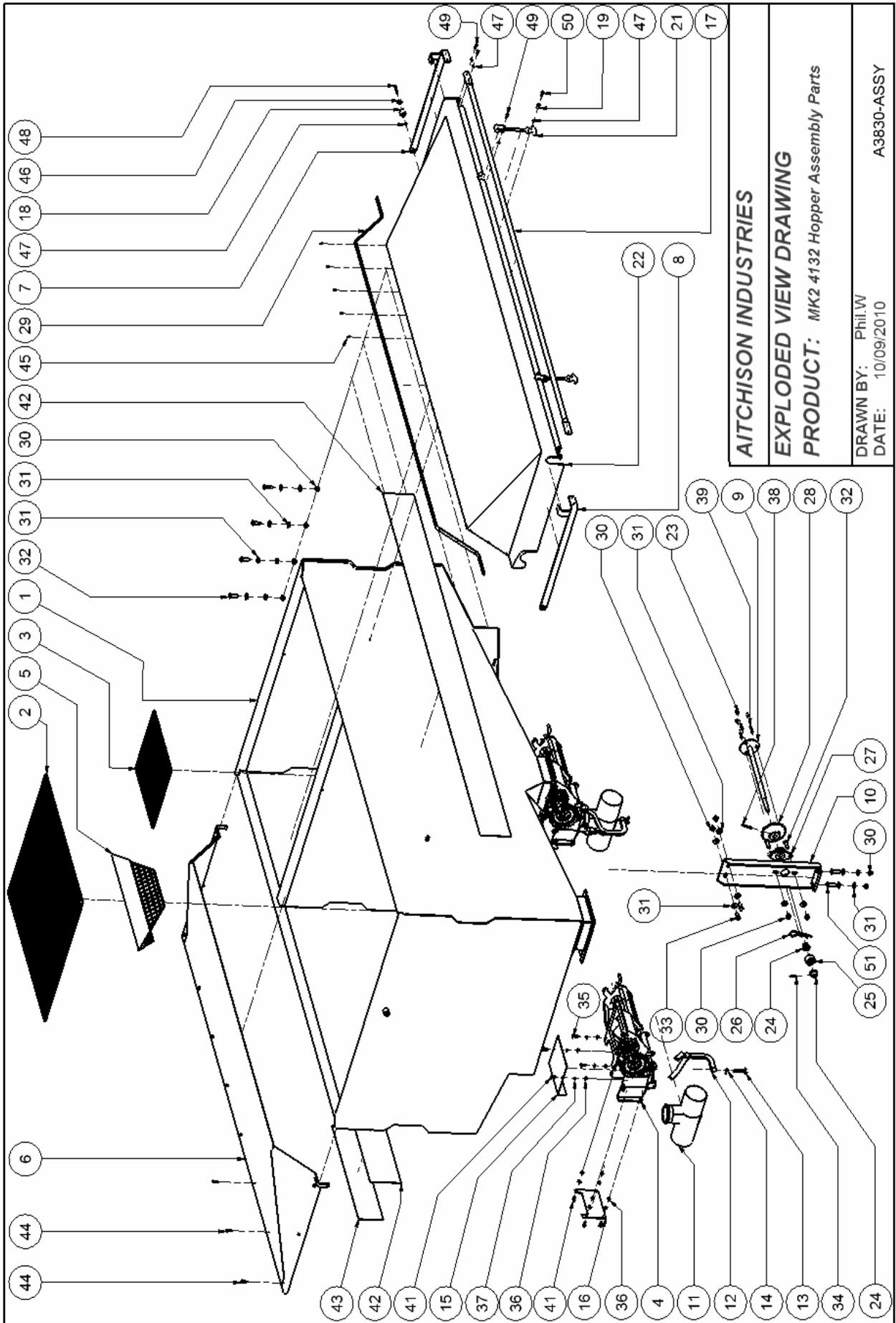
AITCHISON INDUSTRIES

EXPLODED VIEW DRAWING

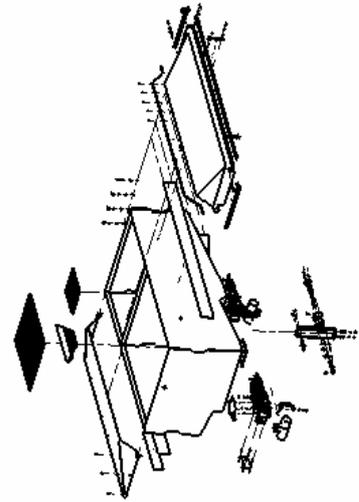
PRODUCT: MK2 4132 Drawbar Part Numbers

DRAWN BY: Phil W
DATE: 7/09/2010

A3801-ASSY



Parts List		Parts List		Parts List			
ITEM	QTY	DESCRIPTION	PART NUMBER	ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	MK2 4132 Hopper Assembly	A3830	27	1	UCFL 204 Bearing / Housing	9221 / 9220
2	1	MK2 4132 Hopper Fert Grill Assembly	A3831	28	1	27T Sprocket Half Inch Pitch	A2322-01
3	1	MK2 4132 Hopper Seed Grill Assembly	A3832	29	1	MK2 Hopper Soft Top Keeper	A3845
4	2	Metering Unit Assembly	A3544	30	14	M 12 Nylock Nut	9151
5	1	MK2 4132 Hopper Fert Bottom Grill Assembly	A3833	31	26	12mm HD Flat Washer	9053
6	1	MK2 Hopper Rear Lid Assembly	A3834	32	10	M12 x 35 Bolt	8510H
7	1	MK2 Hopper Lid LH Hinge Assembly	A3835L	33	2	M12 x 30 Bolt	8523H
8	1	MK2 Hopper Lid RH Hinge Assembly	A3835R	34	1	6 x 30 Roll Pin	9250
9	1	MK2 Metering Unit Drive Flange Assembly	A3836	35	16	M8 x 25 SS Bolt	8305 S
10	1	MK2 Hopper Centre Support Assembly	A3837	36	20	M8 SS Nylock Nut	9105 S
11	2	MK2 4" Venturi Assembly	A3838	37	36	8mm SS Flat Washer	9031 S
12	2	MK2 4" Venturi Keeper Assembly	A3839	38	1	6 x 50 Roll Pin	9262
13	2	Difussor Locking Bolt	A3577-89	39	3	M6 x 35 SS Bolt	8217 S
14	2	Difussor Locking Nut	A3577-90	40	8	M8 Nylock Nut	9105
15	2	Metering Unit Injector Top Cover	A3544-60	41	12	M8 x 20 SS Bolt	8311 S
16	2	Metering Unit Injector Rear Cover	A3544-61	42	2	Decal - Yellow Panel Lable 2.5m	D1509
17	1	MK2 Hopper Lid Front Rail	A3840	43	1	Air Pro 4132CP	D3501
18	2	Soft Top Hinge	A3575-43	44	12	M5 x 25 Tec Screw	A4626
19	2	Soft Top Catch	A3575-44	45	21	6-8 SS Rivet	9301
20	2	Soft Top Front Rail Clamp Plate	A3575-45	46	2	6mm Stainless Steel Fender Washer	9022 S
21	2	Rubber Hold-down Latch 120mm	00844	47	10	M6 SS Nylock Nut	9109 S
22	1	MK2 Hopper Soft Top Cover	A3841	48	2	M6 x 45 SSBolt	8203 S
23	3	MK2 Metering Unit Drive Boss	A3842	49	6	M6 x 20 SS Bolt	8205 S
24	2	MK2 Metering Unit Flexy Drive Gear	A3843	50	2	M6 x 30 SS Bolt	8212 S
25	1	GDRO 6 14 G8 Cuppling	A3844	51	2	M12 x 40 Bolt	8503H
26	1	5mm R Clip	9289	52	1	"Crank Decal"	D3504



AITCHISON INDUSTRIES

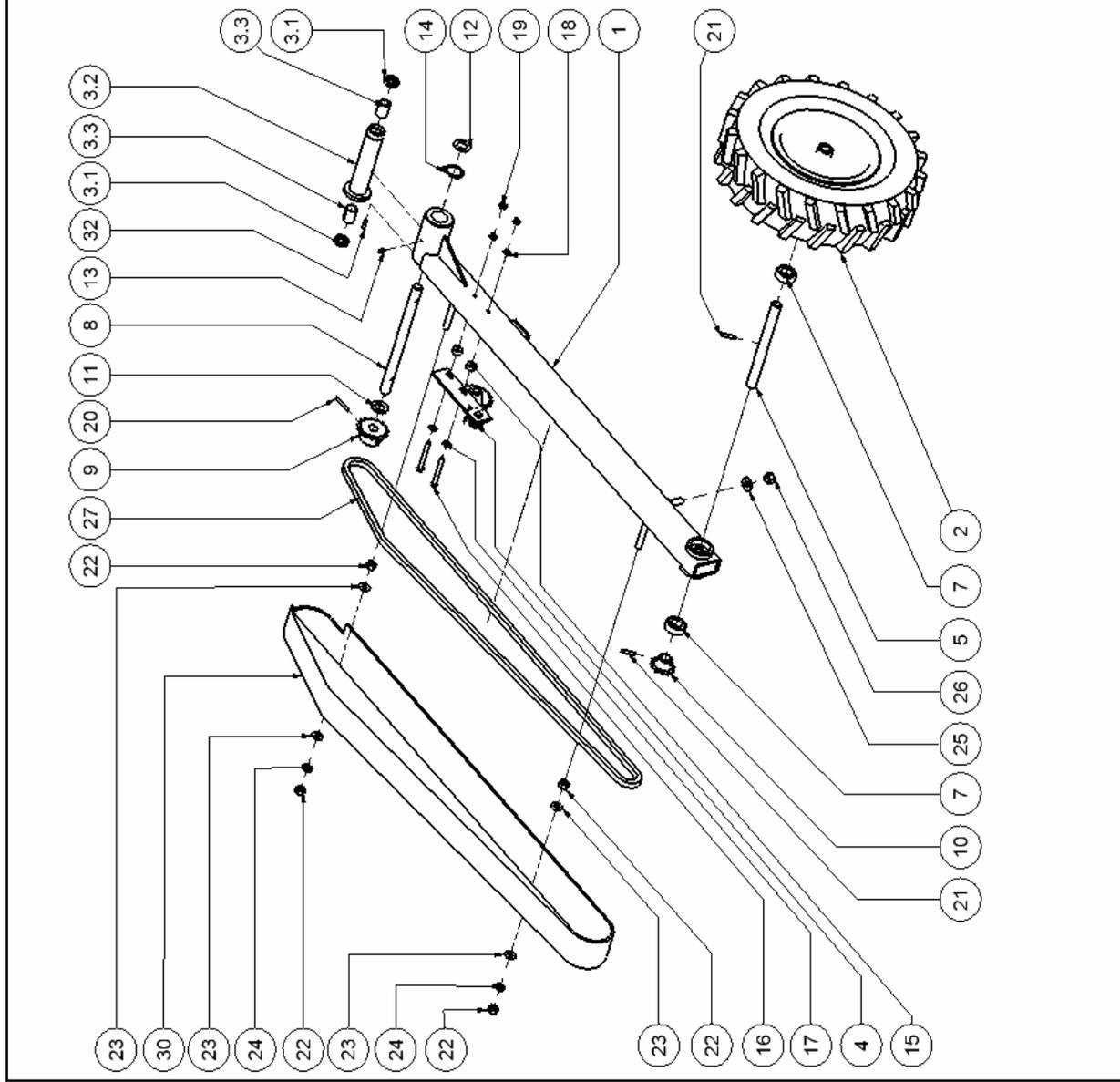
EXPLODED VIEW DRAWING

PRODUCT: MK2 4132 Hopper Assembly Part Numbers

DRAWN BY: Phil.W
DATE: 13/09/2010

A3830-ASSY

ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Drive Leg	A28005
2	1	Rancher Drive Wheel	A28013
3	1	Drive Depth leg Knuckle	A2314
3.1	2	Seal 20x30x7	9229
3.2	1	Drive Leg Pivot Pin	A2314-04
3.3	2	MB 2030 DU Glacier Bush	A2314-03
4	1	Chain Tensioner 1/2" Floating	A2350
5	1	Drive Wheel Axle	A28006
6	1	Drive Wheel Boss	A28035
7	2	6004 Bearing 2RS	9227
8	1	Rancher 20mm Lay Shaft	A28007
9	1	15T Sprocket 1/2" Pitch	A28010
10	1	11T Sprocket 1/2" Pitch	A28012
11	1	20mm x 3 Flat Washer Z/P	9070
12	1	20mm Flat Washer Z/P	9074
13	1	M6 Stright Grease Nipple	9323
14	1	35mm External Circlip	9242
15	2	Spacer 10mm	A2270-11
16	2	M8 x 65 Bolt	8315H
17	2	8mm Flat Washer	9031
18	2	8mm Spring Washer	9030
19	2	M8 Nut	9106
20	1	6 x 40 Roll Pin	9152
21	2	6 x 30 Roll Pin	9250
22	4	M12 Nut	9152
23	4	12mm Flat Washer	9051
24	2	12mm Spring Washer	9052
25	1	12mm HD Flat Washer	9054
26	1	M12 Nyloc Nut	9151
27	1	GF Drive Leg Chain @ 2.15m	A28019
28	1	1/2" Chain Joiner	ZCH 1/2" J
29	1	1/2" Chain 1/2 Link	ZCH 1/2 L
30	1	GF Plastic Drive Leg Cover	A2821-01
32	1	6 x 20 Roll Pin	9269



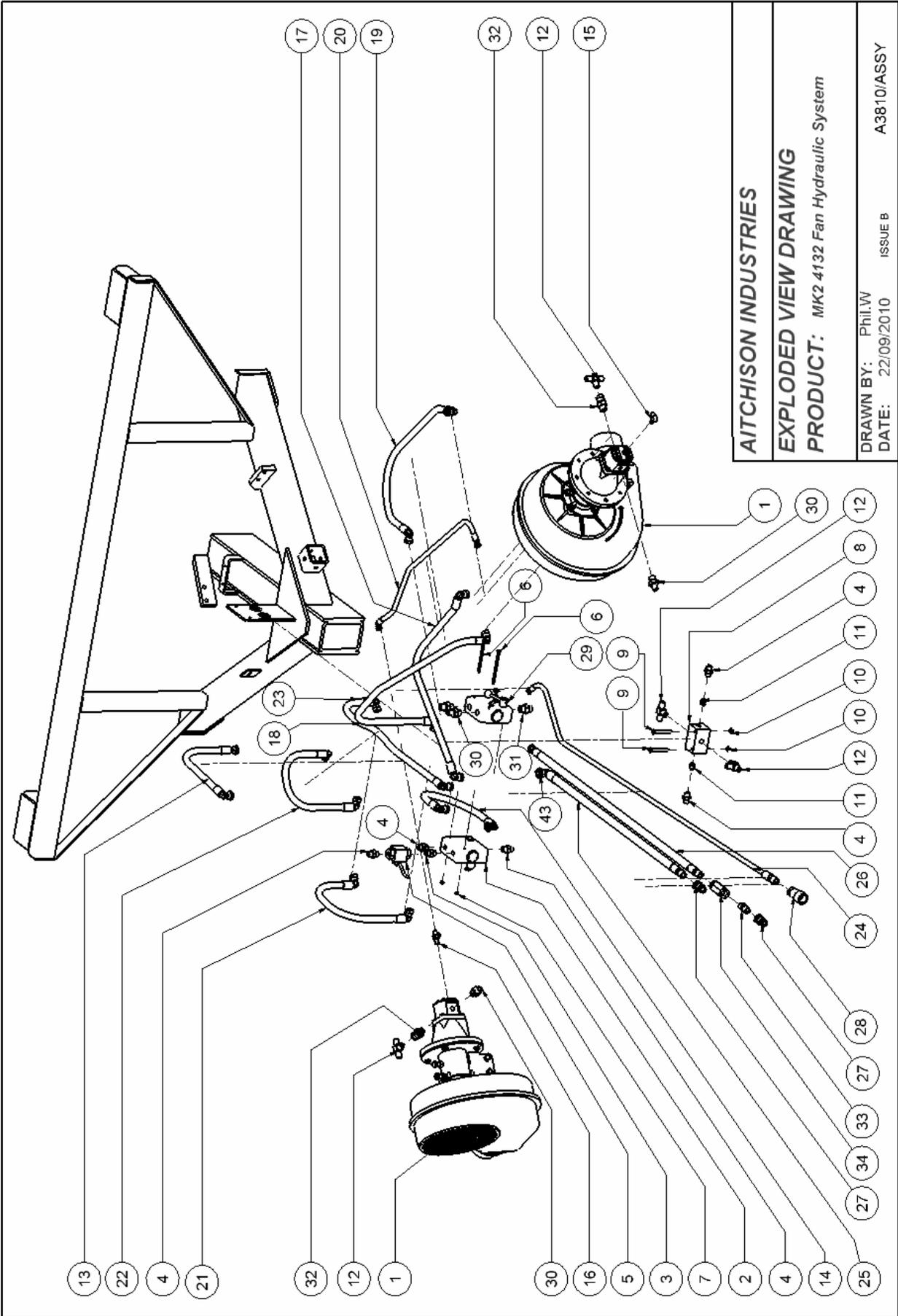
AITCHISON INDUSTRIES

EXPLODED VIEW DRAWING

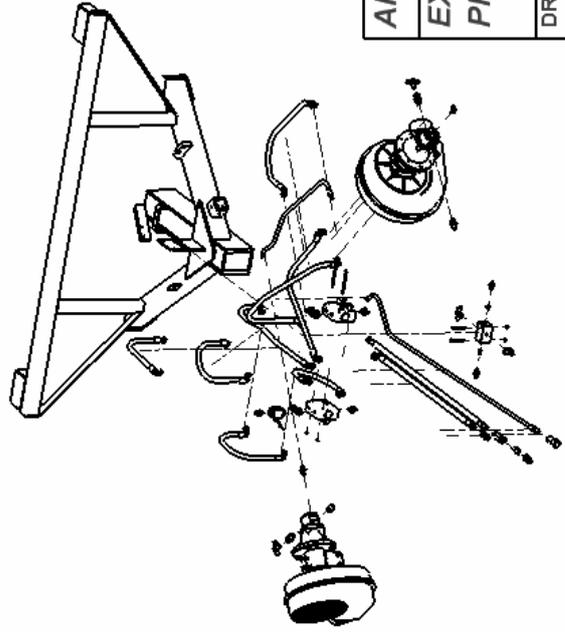
PRODUCT: GRASSFARMER Drive Leg Parts

DRAWN BY: Phil.W
DATE: 10/11/2008

A28065-Assy



Parts List			Parts List				
ITEM	QTY	DESCRIPTION	PART NUMBER	ITEM	QTY	DESCRIPTION	PART NUMBER
1	2	Fan & Drive Assembly	A3810/A1	18	1	3/8" Hose 1st motor out to check	A3810H-04
2	1	CP-RD137-8 Flow Control	A38110	19	1	3/8" Hose 1st Motor out	A3810H-05
3	1	3/8"BSPT to 3/8"BSPT Male Adaptor	A38111	20	1	1/4" Hose Case drain M to M	A3810H-06
4	5	3/8"BSPT to 3/8"BSPP Male Nipple	A38112	21	1	3/8" Hose 2nd Motor out check	A3810H-07
5	1	3/8" Ball Valve	A3700-40-11	22	1	3/8" Hose 2nd Motor out	A3810H-08
6	2	M6 x 105 Bolt	8227H	23	1	3/8" Hose FC out to 2nd HM	A3810H-09
7	2	M6 Nylock Nut	9109	24	1	1/4" Hose Case Drain to tank	A3810H-10
8	1	Check Valve Manifold	A38113	25	1	3/8" Hose Fan Drive in	A3810H-11
9	2	M8 x 65 Bolt	8315H	26	1	3/8" Hose Fan Drive out	A3810H-12
10	2	M8 Nylock Nut	9105	27	2	1/2" Quick Release Coupling	A3700-40-15
11	2	MTC-VUI02 Check Valve Insert 3/8" BSP	A38114	28	1	1/2" Quick Release Coupling Female	A38119
12	4	3/8"BSPT All Male T	A3700-41-6	29	1	CP-RD150 Flow Control	A3597-02
13	1	3/8" Hose EF Ball Valve Out	A3810H-01	30	4	1/2"BSPT to 3/8"BSPP Male Nipple	A3700-42-22
14	1	3/8" Hose FC out to FC in	A3810H-02	31	1	1/2"BSPT to 1/2"BSPP Male Nipple	H38101
15	1	1/4" BSP C-Pac 90 with Locknut	A38117-01	32	2	1/2"BSPT to 3/8"BSPP Swivel Nut; Male to Female Nipple	H38102
16	1	1/4" BSPP All Male T	A38117-02	33	1	1/2" BSPTM to 1/2" BSPTM Adaptor	H38103
17	1	3/8" Hose FC out to 1st HM	A3810H-03	34	1	1/2" Check Valve 0.35Bar	A3700-42-20



AITCHISON INDUSTRIES

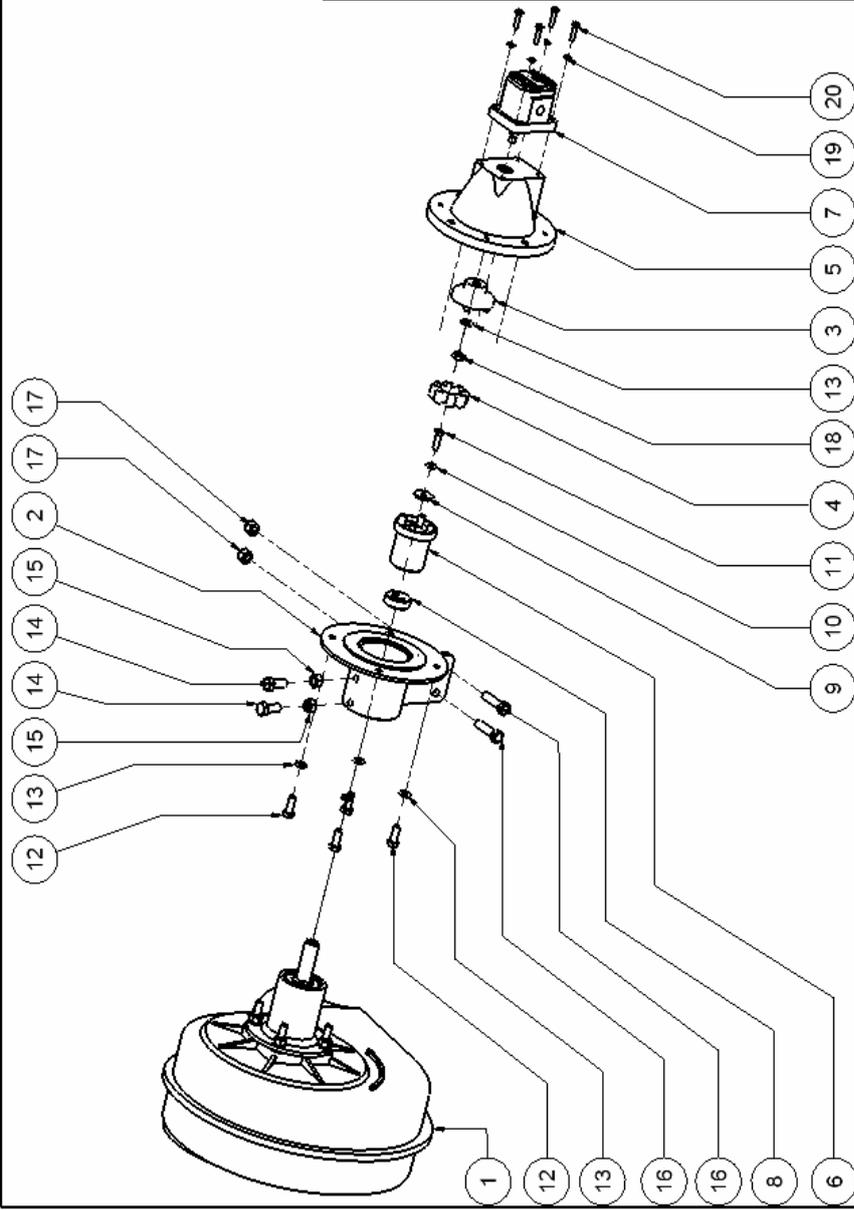
EXPLODED VIEW DRAWING

PRODUCT: MK2 4132 Fan Hydraulic System Parts

DRAWN BY: Phil.W

DATE: 22/09/2010 ISSUE C

A3810/ASSY



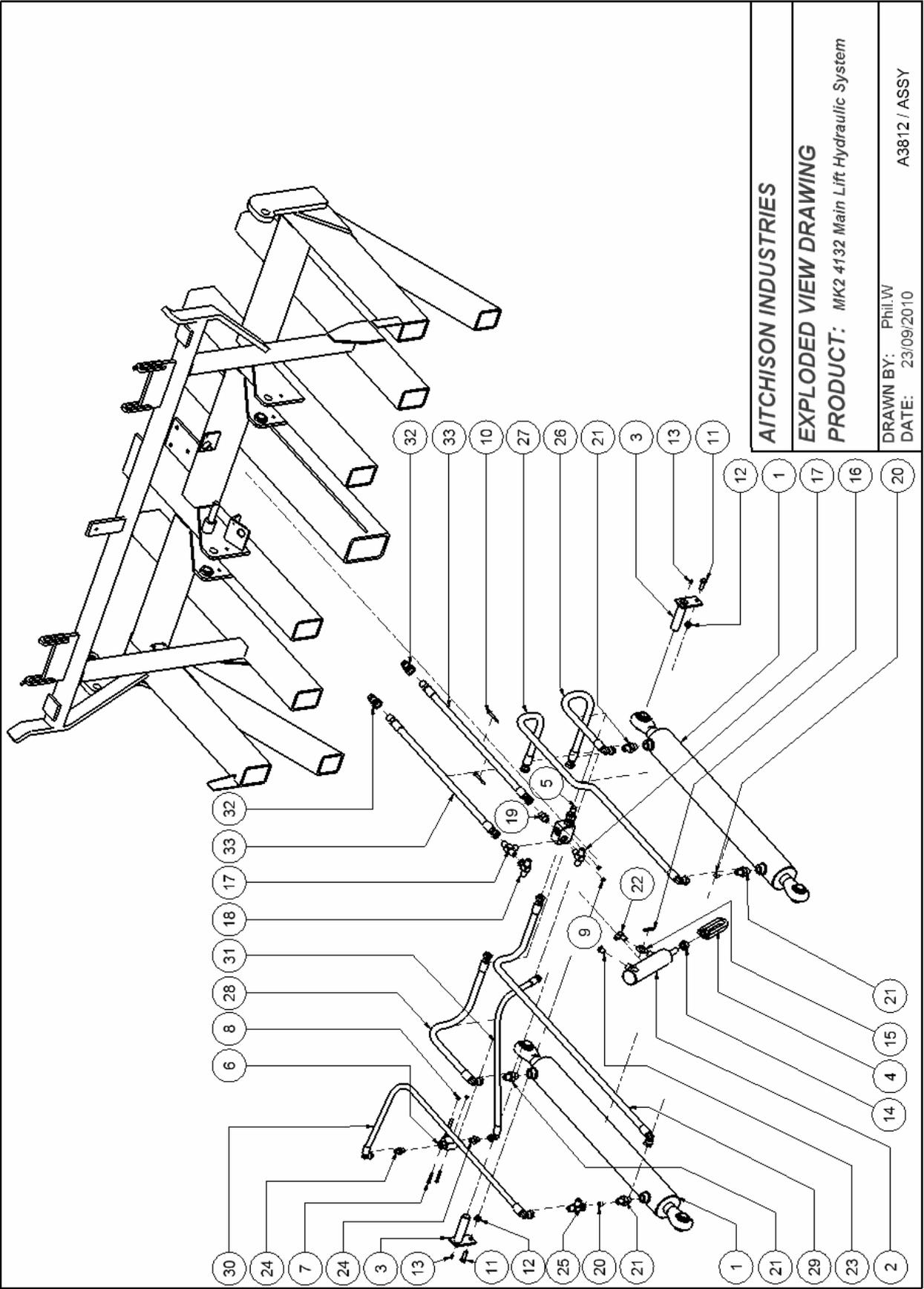
Parts List			
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Fan & Bearing Mount Assembly	A3546
2	1	MK2 Fan Drive Mount Assembly	A38101
3	1	65mm OD, 1:8 Large Taper, 21.5mm Long Coupling	A3810-01
4	1	HC-R62 Coupling Insert	A3810-02
5	1	Bell Housing, Grp 1.5 - 80 Frame	A3810-03
6	1	MK2 Fan to Motor Coupling	A3810-04
7	1	Hydraulic Motor 6.08cc 1/2" Ports Mazocchi Special	A3810
8	1	MK2 Fan Coupling Spacer	A38102
9	1	MK2 Fan Coupling Washer	A38103
10	1	8mm Spring Washer	9030
11	1	M8 x 25 Bolt	8305H
12	4	M10 x 25 Bolt	8418H
13	5	10mm Spring Washer	9041
14	2	M12 x 30 Bolt	8523H
15	2	M12 Nut	9152
16	2	M12 x 45 Bolt	8504H
17	2	M12 Nylock Nut	9151
18	1	M10x1 Half Nut	9140
19	4	6mm Spring Washer	9021
20	4	M6 x 25 Bolt	8213H

AITCHISON INDUSTRIES

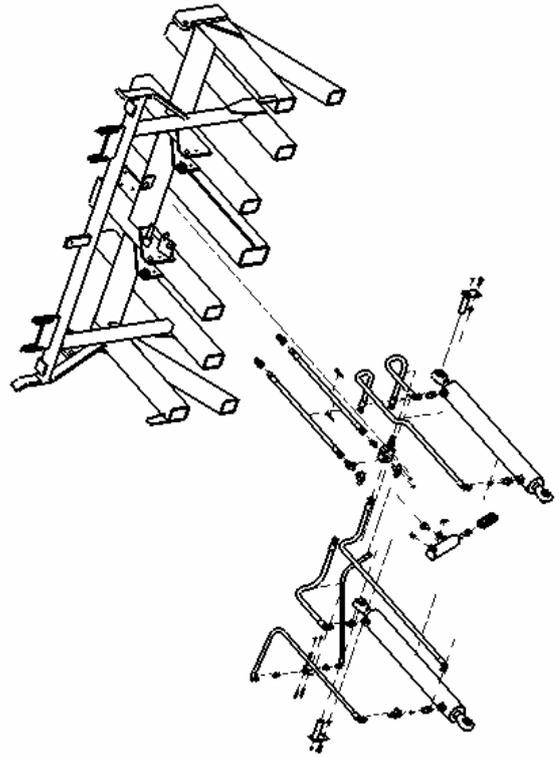
EXPLODED VIEW DRAWING

PRODUCT: MK2 4132 Fan & Drive Assembly Parts

DRAWN BY: Phil.W
 DATE: 22/09/2010
 ISSUE B
 A3810 / A1



Parts List			Parts List				
ITEM	QTY	DESCRIPTION	PART NUMBER	ITEM	QTY	DESCRIPTION	PART NUMBER
1	2	3"x1.5" x 24" Compact Top Link Ram	A3812	18	1	3/8"BSP to 3/8"BSP Swivel Nut T	A3700-42-17
2	1	Roller Drill Clutch Ram Assembly	A5130-11	19	1	3/8"BSPT to 3/8"BSPP Male Nipple	A3700-40-4
3	2	MK2 Main Ram Pin Assembly	A38120	20	2	Hydraulic Restrictor Insert	A38122
4	1	Drive Arm Ram Clevis Assembly	A3534	21	4	1/2"BSPT to 3/8"BSPP Male Nipple	A3700-42-22
5	1	Relief Valve D/A 3/8" BSP c/w Cap	A38121	22	1	1/4"BSPT to 1/4"BSPT C-Pac 90	A38123
6	1	1/4" Ball Valve	A3700-41-12	23	1	1/4"BSPT Bung	A38124
7	2	M5 x 40 Bolt	8101	24	2	1/4"BSPT to 1/4"BSPP Male Nipple	A3700-41-10
8	2	M5 Nyloc Nut	9102 S	25	1	3/8"BSPT Male / F-Male Swivel T	A3700-41-5
9	2	M6 Nylock Nut	9109	26	1	Hose Drawbar RH Ram Front	A3812H-01
10	2	M6 x 50 Bolt	8210H	27	1	Hose Drawbar RH Ram Rear	A3812H-02
11	2	M10 x 30 Bolt	8415H	28	1	Hose Drawbar LH Ram Front	A3812H-03
12	2	M10 Nylock Nut	9142	29	1	Hose Drawbar LH Ram Rear	A3812H-04
13	2	M6 Stright Grease Nipple	9323	30	1	Hose Drawbar LH Ram To Ball Valve	A3812H-05
14	1	M16 Nut	9161	31	1	Hose Drawbar Ball Valve to DL	A3812H-06
15	1	20mm Flat Washer	9074	32	2	1/2" Quick Release Coupling	A3700-40-15
16	1	6 x 40 Roll Pin	9251	33	2	Hose Main 3/8" Hose	A3812H-07
17	2	3/8"BSPT All Male T	A3700-41-6				



AITCHISON INDUSTRIES

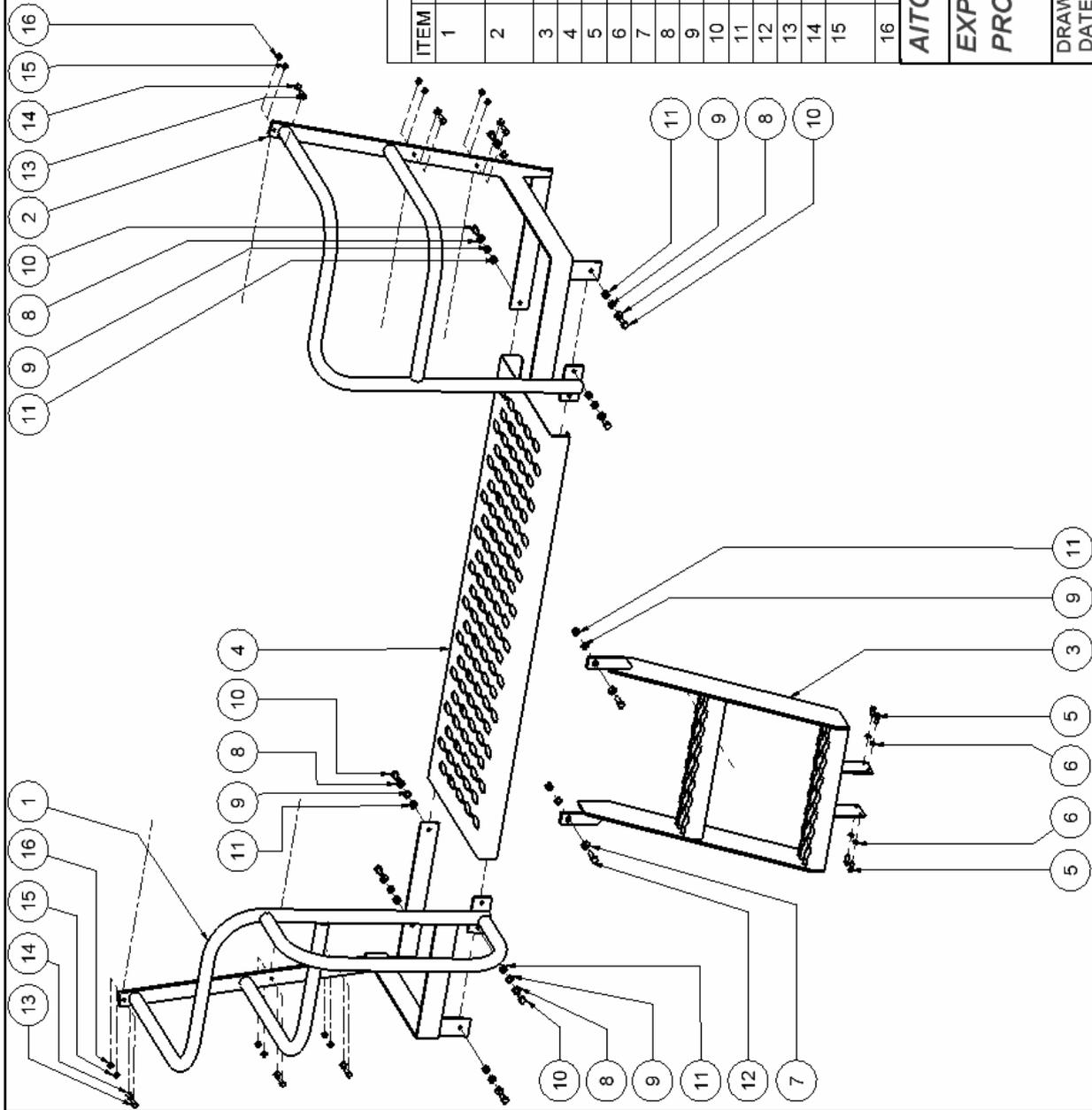
EXPLODED VIEW DRAWING

PRODUCT: Mk2 4132 Main Lift Hydraulic Parts

DRAWN BY: Phil.W

DATE: 23/09/2010

A3812 / ASSY



Parts List			
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	MK2 Front Treadboard RH Safety Rail Assembly	A3808R
2	1	MK2 Front Treadboard LH Safety Rail Assembly	A3808L
3	1	MK2 Front Step Assembly	A38080
4	1	450 x 50 x 1200 Tread Board	A38081
5	4	M8 x 20 Bolt	8311H
6	4	8mm Spring Washer	9030
7	2	10mm HD Flat Washer	9040
8	8	10 mm Flat Washer	9042
9	10	10mm Spring Washer	9041
10	8	M10 x 25 Bolt	8418H
11	10	M10 Nut	9141
12	2	M10 x 35 Bolt	8402H
13	6	M8 x 25 SS Bolt	8305 S
14	6	8mm SS Flat Washer	9031 S
15	6	8mm Stainless Steel Spring Washer	9030 S
16	6	M8 Stainless Steel Nut	9106 S

AITCHISON INDUSTRIES

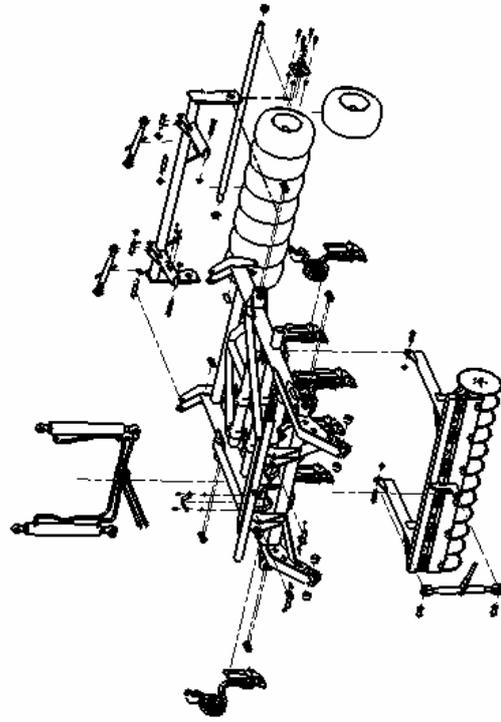
EXPLODED VIEW DRAWING

PRODUCT: MK2 4132 Front Treadboard Assembly

DRAWN BY: Phil.W
DATE: 20/09/2010

A3808-ASSY

Parts List			Parts List				
ITEM	QTY	DESCRIPTION	PART NUMBER	ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	MK2 Centre Frame Assembly	A3850	16	2	M10 Nylock Nut	9142
2	8	25mm RH Centre Double Coultter Tine Assembly	A3549	17	2	M6 Stright Grease Nipple	9323
3	2	25mm LH Centre Double Coultter Tine Assembly	A3548	18	2	Main Hose Clamp Plate	A3592-01
4	1	MK2 Centre Disc Coultter Assembly	A3851 / ASSY	19	4	M8 x 35 Bolt	8310H
5	1	Wing Roller	See Below	20	4	M8 Nylock Nut	9105
5.1	1	MK2 Wing Roller Axle	A38521	21	2	M20 x 90 Bolt	8710H
5.2	8	18.5 x 8.50 x 8 Wheel (50.5mm) Bore	A38522	22	4	M20 Nylock Nut	9172
5.3	2	MK2 Roller Axle Spacer	A38523	23	2	M20 x 120 Bolt	8704H
5.4	2	UCF 208 Bearing / Housing	92242 / 92241	24	10	M16 x 50 Bolt	8616H
6	1	MK2 Centre Roller Frame Assembly	A3853	25	8	M16 Nyloc Nut	16A
7	2	Turnbuckle	A23189-01	29	2	MK2 Roller Depth Gauge Pointer	A3857
8	1	Ratchet Link	A23127	30	4	M6 x 25 Bolt	8213H
9	2	MK2 Main Ram Pin Assembly	A38120	31	4	M6 Nylock Nut	9109
10	2	Ratchet Link Pin / Clip	A2646 / A2646	32	2	MK2 Roller Depth Decal	D3509
11	1	Wing Lift Hydraulic System	A3854 / ASSY	33	2	Top Link Pin B1200	A3858
12	4	1.1mm Linch Pin	9288	34	2	Top Link Pin B81	AQH-1009
13	8	FMB 3526DU	A3710-53	35	2	MK2 Roller Wheel Retainer Washer	A3856
14	4	MB 5040DU	A3855	36	2	16mm Spring Washer	9061
15	2	M10 x 30 Bolt	8415H				



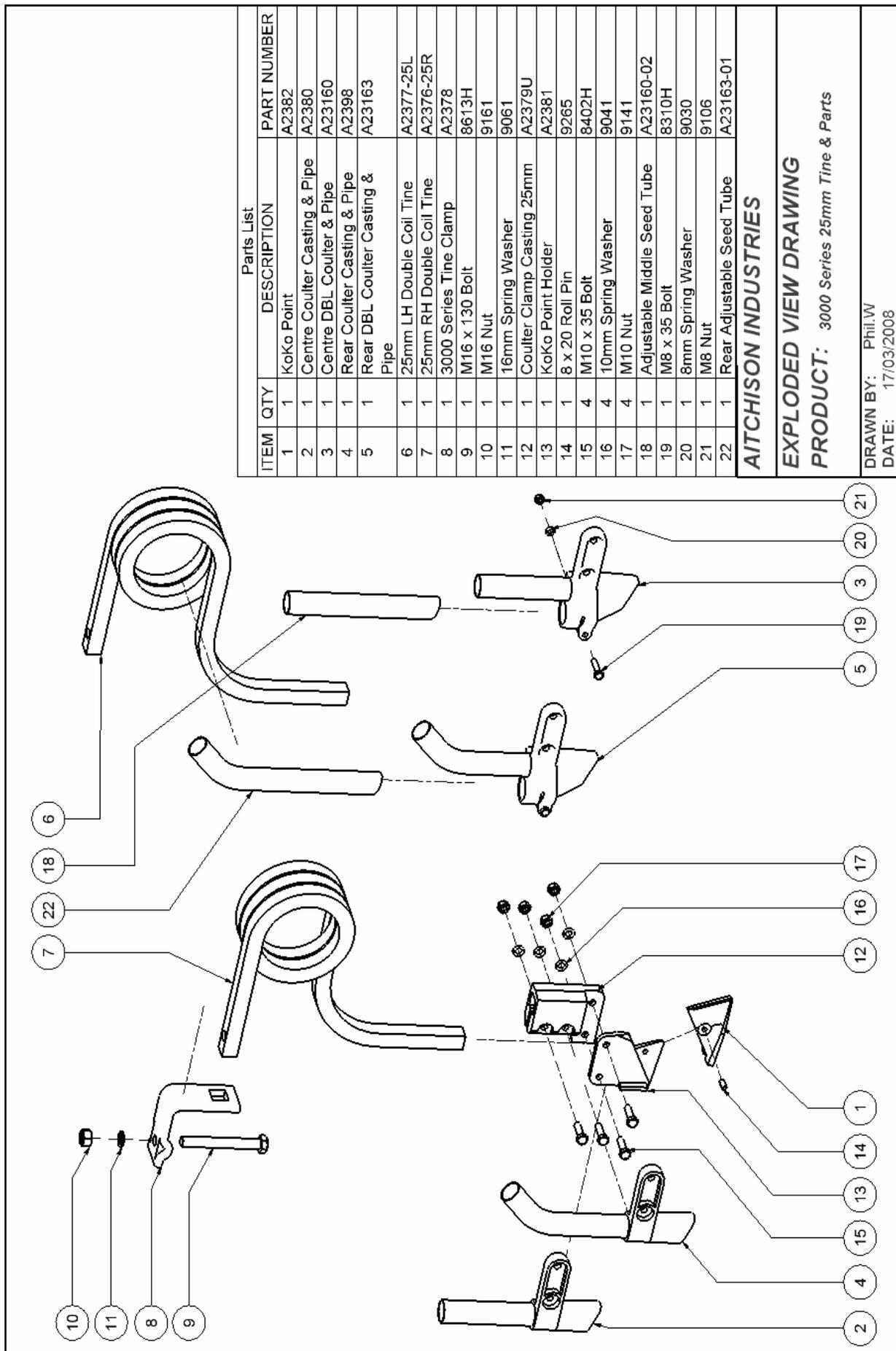
AITCHISON INDUSTRIES

EXPLODED VIEW DRAWING

PRODUCT: MK2 4132 Centre Frame Assembly Parts

DRAWN BY: Phil.W
DATE: 27/09/2010

A3850 - ASSY



Parts List			
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	KoKo Point	A2382
2	1	Centre Coultter Casting & Pipe	A2380
3	1	Centre DBL Coultter & Pipe	A23160
4	1	Rear Coultter Casting & Pipe	A2398
5	1	Rear DBL Coultter Casting & Pipe	A23163
6	1	25mm LH Double Coil Tine	A2377-25L
7	1	25mm RH Double Coil Tine	A2376-25R
8	1	3000 Series Tine Clamp	A2378
9	1	M16 x 130 Bolt	8613H
10	1	M16 Nut	9161
11	1	16mm Spring Washer	9061
12	1	Coultter Clamp Casting 25mm	A2379U
13	1	KoKo Point Holder	A2381
14	1	8 x 20 Roll Pin	9265
15	4	M10 x 35 Bolt	8402H
16	4	10mm Spring Washer	9041
17	4	M10 Nut	9141
18	1	Adjustable Middle Seed Tube	A23160-02
19	1	M8 x 35 Bolt	8310H
20	1	8mm Spring Washer	9030
21	1	M8 Nut	9106
22	1	Rear Adjustable Seed Tube	A23163-01

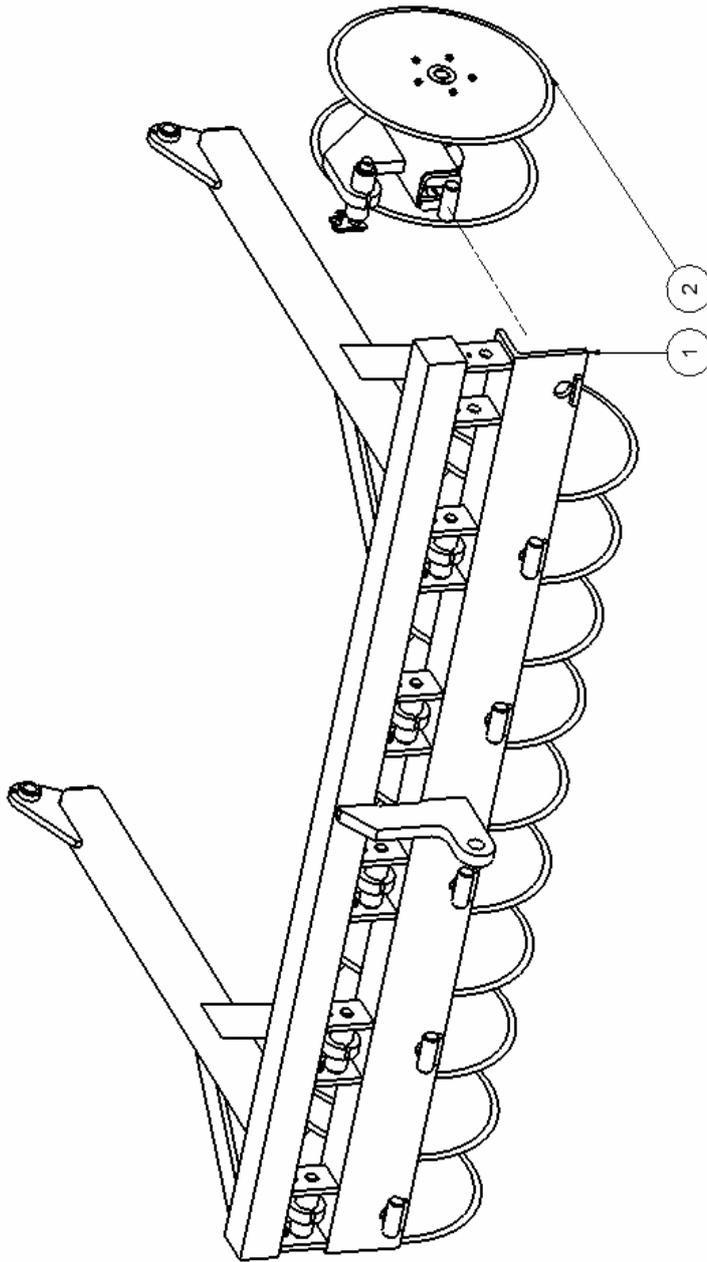
AITCHISON INDUSTRIES

EXPLODED VIEW DRAWING

PRODUCT: 3000 Series 25mm Tine & Parts

DRAWN BY: Phil.W

DATE: 17/03/2008



Parts List			
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	MK2 Centre Disc Coupler Beam Assembly	A3851 / A1
2	6	150mm 14inch Disc Pod Assembly	A28081

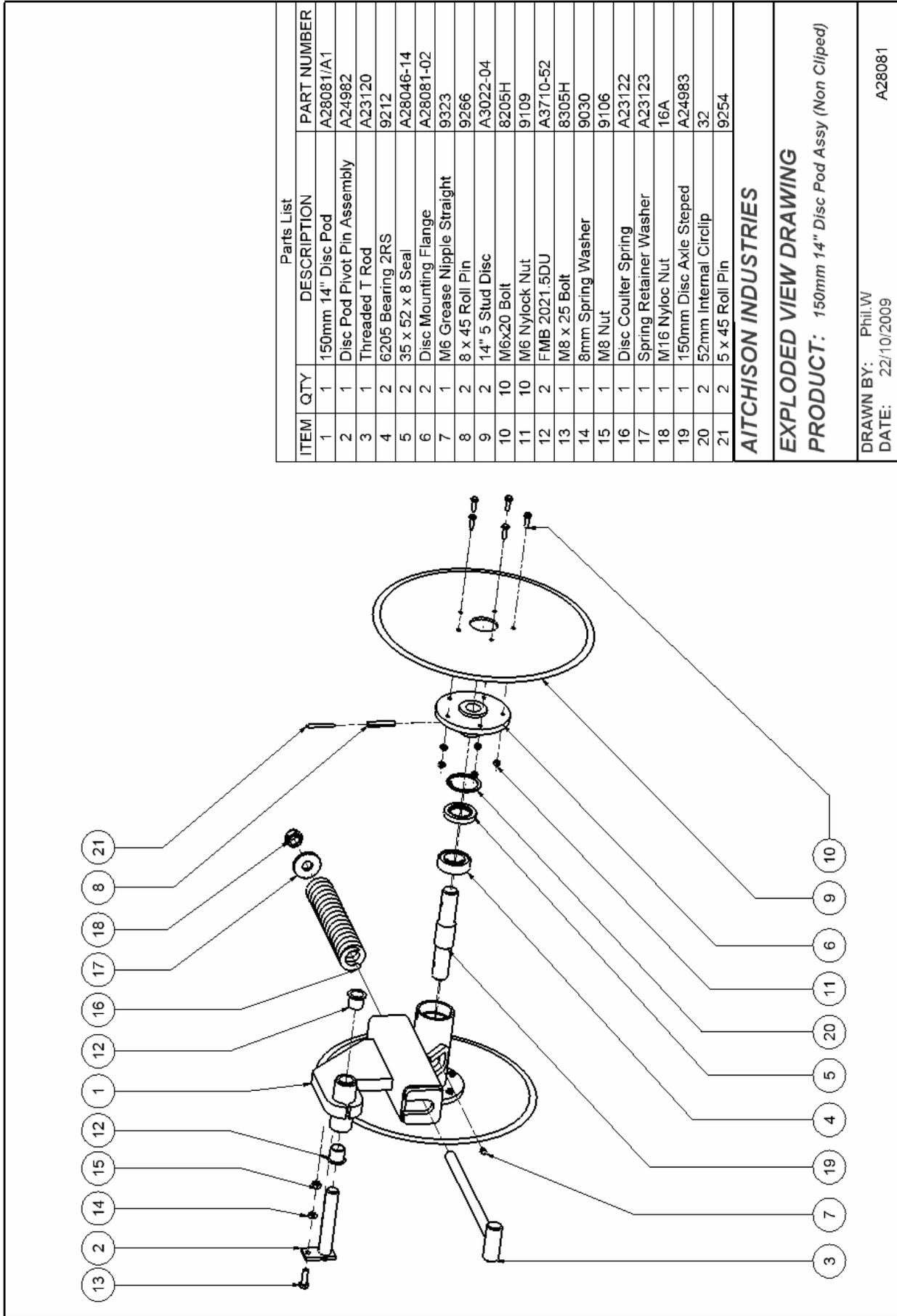
AITCHISON INDUSTRIES

EXPLODED VIEW DRAWING

PRODUCT: MK2 Centre Disc Coupler Assembly

DRAWN BY: Phil.W
DATE: 27/09/2010

A3851 / ASSY



Parts List			
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	150mm 14" Disc Pod	A28081/A1
2	1	Disc Pod Pivot Pin Assembly	A24982
3	1	Threaded T Rod	A23120
4	2	6205 Bearing 2RS	9212
5	2	35 x 52 x 8 Seal	A28046-14
6	2	Disc Mounting Flange	A28081-02
7	1	M6 Grease Nipple Straight	9323
8	2	8 x 45 Roll Pin	9266
9	2	14" 5 Stud Disc	A3022-04
10	10	M6x20 Bolt	8205H
11	10	M6 Nylock Nut	9109
12	2	FMB 2021 5DU	A3710-52
13	1	M8 x 25 Bolt	8305H
14	1	8mm Spring Washer	9030
15	1	M8 Nut	9106
16	1	Disc Coupler Spring	A23122
17	1	Spring Retainer Washer	A23123
18	1	M16 Nyloc Nut	16A
19	1	150mm Disc Axle Steped	A24983
20	2	52mm Internal Circlip	32
21	2	5 x 45 Roll Pin	9254

AITCHISON INDUSTRIES

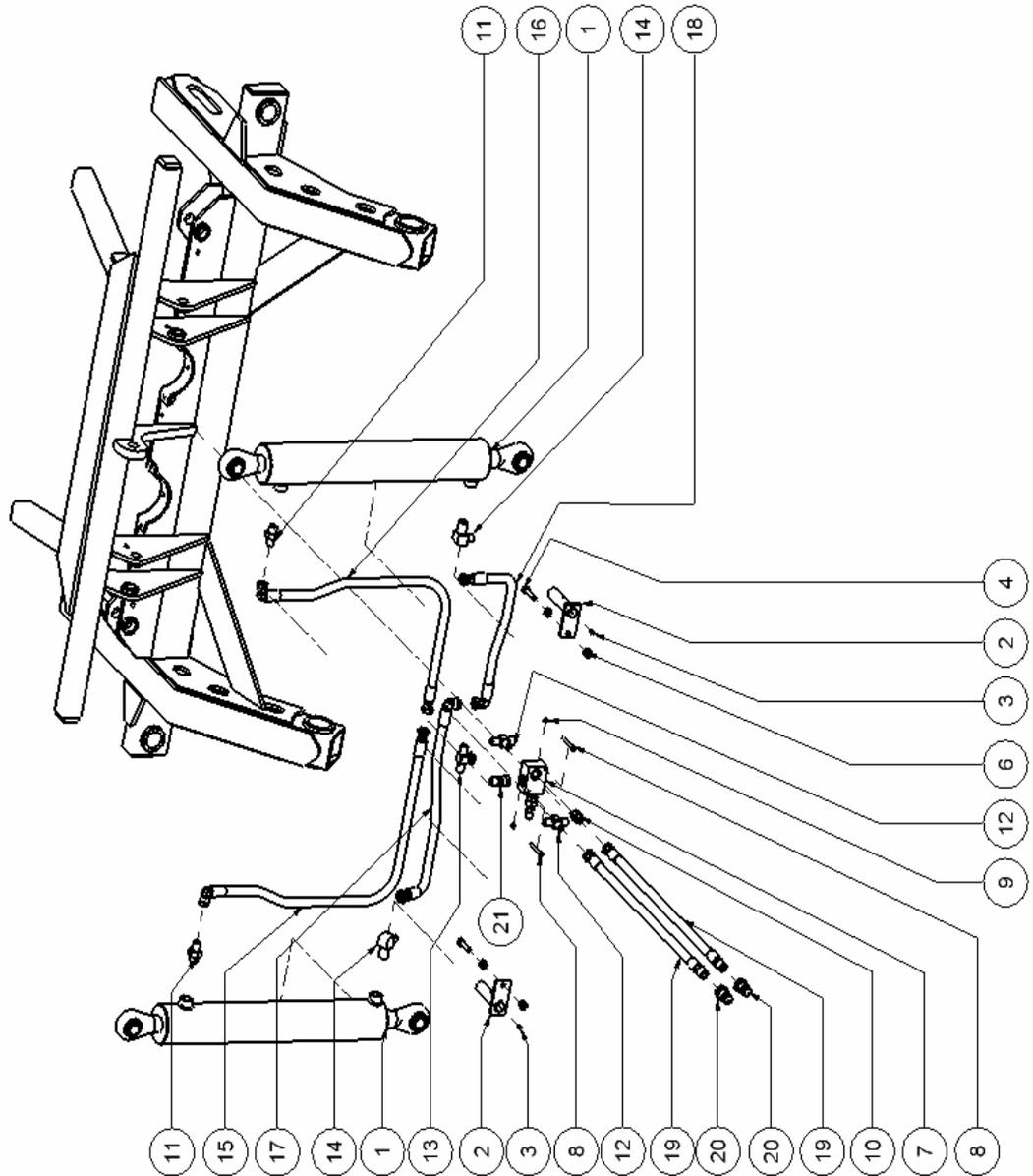
EXPLODED VIEW DRAWING

PRODUCT: 150mm 14" Disc Pod Assy (Non Clipped)

DRAWN BY: Phil.W
DATE: 22/10/2009

A28081

Parts List			
ITEM	QTY	DESCRIPTION	PART NUMBER
1	2	3"x1.5" x 18" Compact Top Link Ram	A38541
2	2	MK2 Main Ram Pin Assembly	A38120
3	2	M6 Stright Grease Nipple	9323
4	2	M10 x 40 Bolt	8416H
5	2	M10 Nut	9141
6	2	M10 Nylock Nut	9142
7	1	Relief Valve D/A 3/8" BSP c/w Cap	A38121
8	2	M6 x 55 Bolt	8211H
9	2	M6 Nylock Nut	9109
10	1	3/8"BSPT to 3/8"BSPP Male Nipple	A3700-40-4
11	2	1/2"BSPT to 3/8"BSPP Male Nipple	A3700-42-22
12	2	3/8"BSPT All Male T	A3700-41-6
13	1	3/8"BSPT to 3/8"BSPT to 3/8"BSPT Swivel Nut T	A3700-42-17
14	2	1/2" BSPT to 3/8" BSPP C-PAC 90	A38542
15	1	Hose Wing RH Long	A3850H-01
16	1	Hose Wing LH Long	A3850H-02
17	1	Hose Wing RH Short	A3850H-03
18	1	Hose Wing LH Short	A3850H-04
19	2	Hose Wing Main 3/8"	A3850H-05
20	2	1/2" Quick Release Coupling	A3700-40-15
21	1	3-8BSP to 3-8BSP Male-Female Swivel Nut Adaptor	A38543



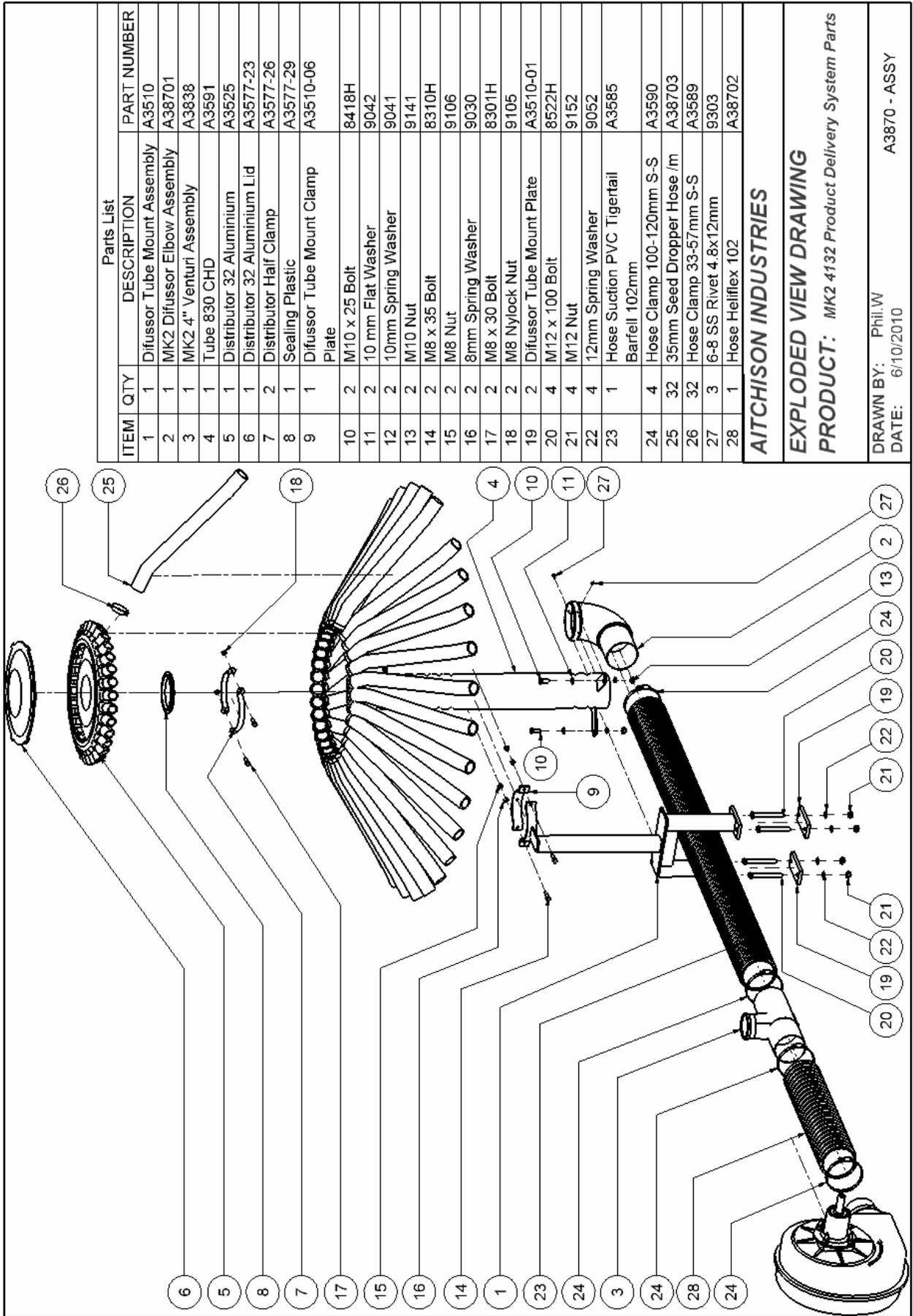
AITCHISON INDUSTRIES

EXPLODED VIEW DRAWING

PRODUCT: MK2 4132 Wing Lift Hydraulic System

DRAWN BY: Phil.W
DATE: 28/09/2010 ISSUE B

A3854 / ASSY



Parts List			PART NUMBER
ITEM	QTY	DESCRIPTION	
1	1	Difussor Tube Mount Assembly	A3510
2	1	MK2 Difussor Elbow Assembly	A38701
3	1	MK2 4" Venturi Assembly	A3838
4	1	Tube 830 CHD	A3591
5	1	Distributor 32 Aluminium	A3525
6	1	Distributor 32 Aluminium Lid	A3577-23
7	2	Distributor Half Clamp	A3577-26
8	1	Sealing Plastic	A3577-29
9	1	Difussor Tube Mount Clamp Plate	A3510-06
10	2	M10 x 25 Bolt	8418H
11	2	10 mm Flat Washer	9042
12	2	10mm Spring Washer	9041
13	2	M10 Nut	9141
14	2	M8 x 35 Bolt	8310H
15	2	M8 Nut	9106
16	2	8mm Spring Washer	9030
17	2	M8 x 30 Bolt	8301H
18	2	M8 Nylock Nut	9105
19	2	Difussor Tube Mount Plate	A3510-01
20	4	M12 x 100 Bolt	8522H
21	4	M12 Nut	9152
22	4	12mm Spring Washer	9052
23	1	Hose Suction PVC Tigerfall Barfell 102mm	A3585
24	4	Hose Clamp 100-120mm S-S	A3590
25	32	35mm Seed Dropper Hose /m	A38703
26	32	Hose Clamp 33-57mm S-S	A3589
27	3	6-8 SS Rivet 4.8x12mm	9303
28	1	Hose Heliflex 102	A38702

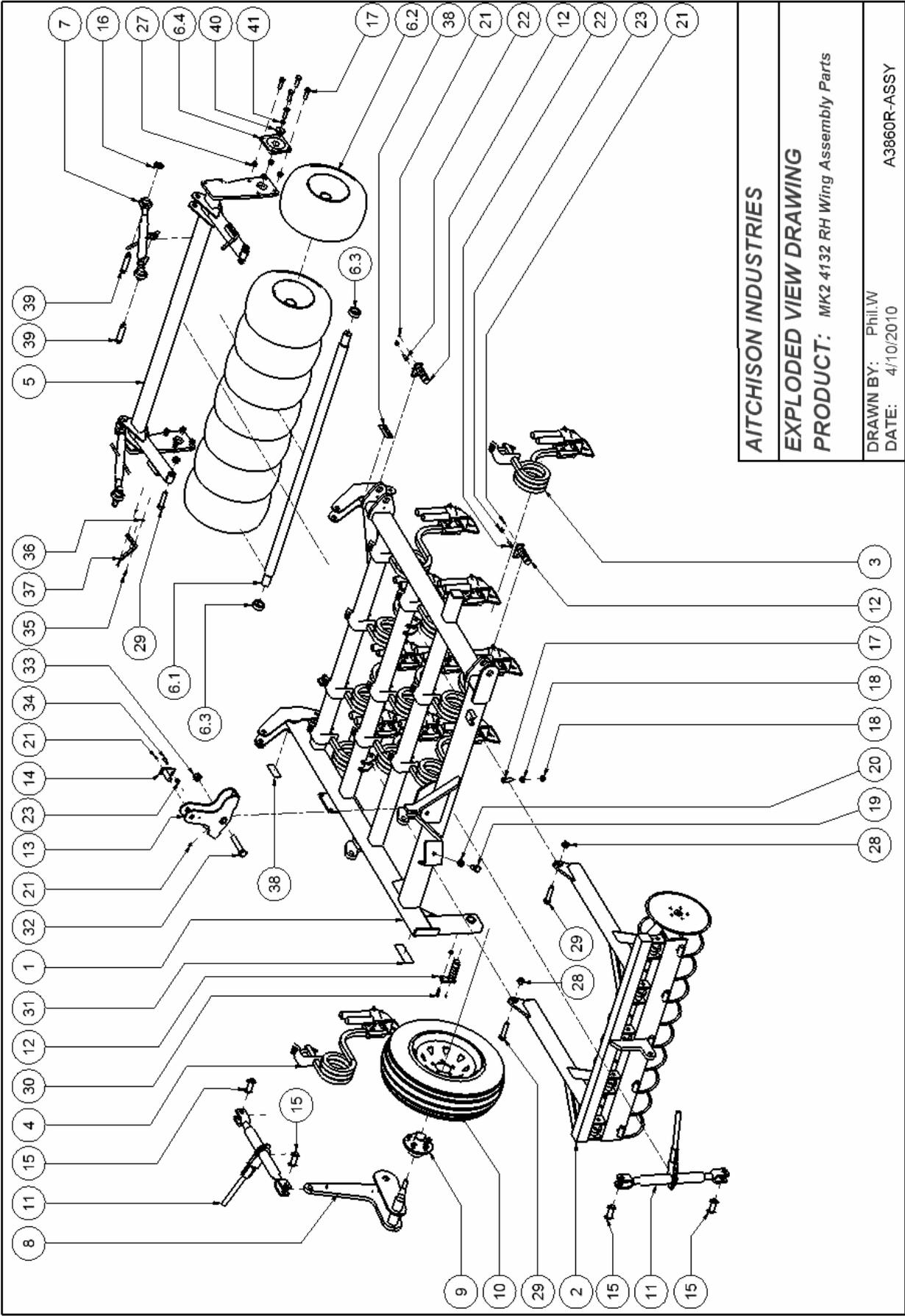
AITCHISON INDUSTRIES

EXPLODED VIEW DRAWING

PRODUCT: MK2 4132 Product Delivery System Parts

DRAWN BY: Phil W
DATE: 6/10/2010

A3870 - ASSY



AITCHISON INDUSTRIES

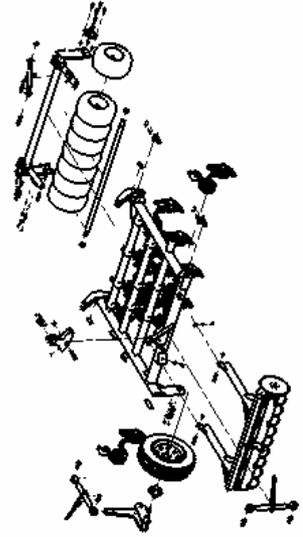
EXPLODED VIEW DRAWING

PRODUCT: MK2 4132 RH Wing Assembly Parts

DRAWN BY: Phil.W
DATE: 4/10/2010

A3860R-ASSY

Parts List				Parts List			
ITEM	QTY	DESCRIPTION	PART NUMBER	ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	MK2 RH Wing Frame Assembly	A3860R	19	1	M20 x 55 Bolt	8718H
2	1	MK2 Wing Disc Coupler Assembly	A3861 / ASSY	20	1	M20 Nut	9171
3	4	25mm LH Centre Double Coupler Tine Assembly	A3548	21	5	M6 Stright Grease Nipple	9323
4	7	25mm RH Centre Double Coupler Tine Assembly	A3549	22	2	M10 x 35 Bolt	8402H
5	1	MK2 Wing Roller Frame Assembly	A3863	23	4	M10 Nylock Nut	9142
6	1	Wing Roller	See Below	27	8	M16 Nyloc Nut	16A
6.1	1	MK2 Wing Roller Axle	A38521	28	4	M20 Nylock Nut	9172
6.2	8	18.5 x 8.50 x 8 Wheel (50.5mm) Bore	A38522	29	4	M20 x 90 Bolt	8710H
6.3	2	MK2 Roller Axle Spacer	A38523	30	1	M10 x 40 Bolt	8416H
6.4	2	UCF 208 Bearing / Housing	92242 / 92241	31	1	Decal - Depth Gauge LH	A3502
7	2	Turnbuckle	A23189-01	32	1	M24 x 130 Bolt	8813H
8	1	RH Wing Depth Wheel Mount Assembly	A3866R	33	1	M24 Nut	9193
9	1	Trojan 5 Stud Hub	TRO82030	34	1	M10 x 30 Bolt	8415H
10	1	14 Inch Wheel	A23184	35	4	M6 x 25 Bolt	8213H
11	2	Ratchet Link	A23127	36	4	M6 Nylock Nut	9109
12	3	MK2 Wing Pivot Pin Assembly	A3867	37	2	MK2 Roller Depth Gauge Pointer	A3857
13	1	MK2 Wing Float Plate Assembly	A3865	38	2	MK2 Roller Depth Decal	D3509
14	1	MK2 Wing Float Plate Pin Assembly	A3864	39	4	Top Link Pin B1200	A3858
15	4	Ratchet Link Pin / Clip	A2645 / A2646	40	2	MK2 Roller Wheel Retainer Washer	A3856
16	4	11mm Linch Pin	9288	41	2	16mm Spring Washer	9061
17	11	M16 x 50 Bolt	8616H	42	1	Decal 125kg Max Weight	D3507
18	2	M16 Nut	9161				



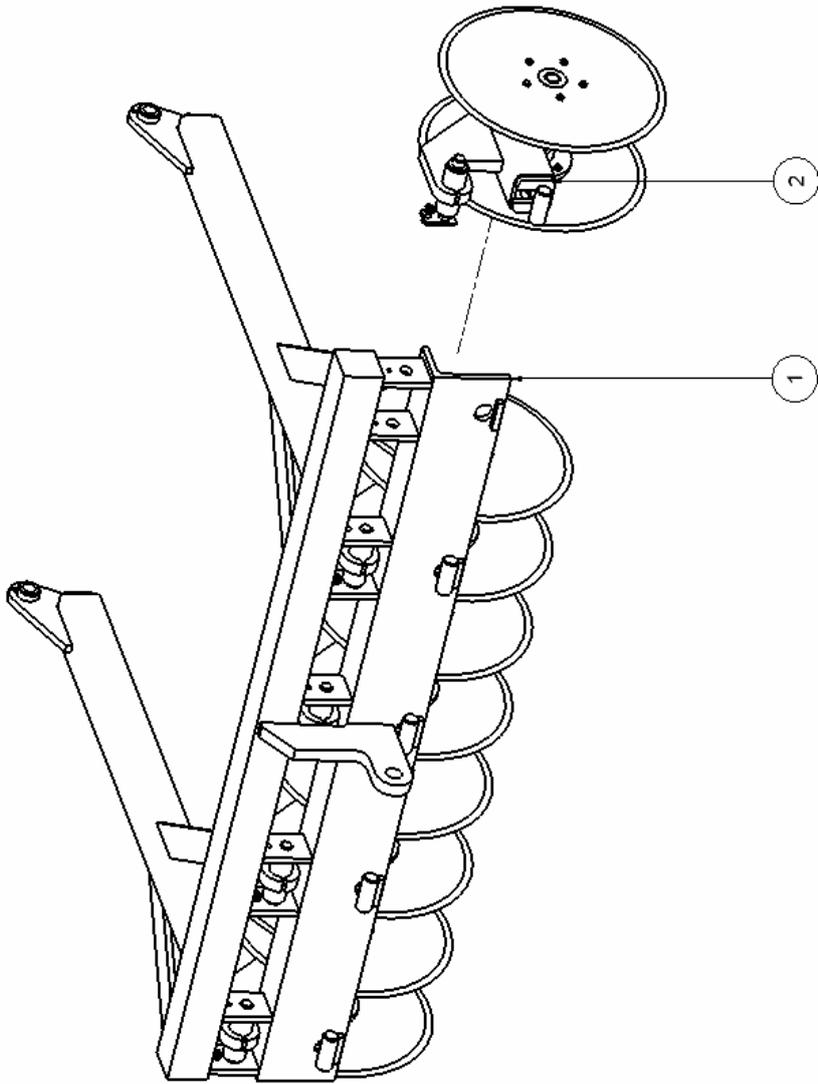
AITCHISON INDUSTRIES

EXPLODED VIEW DRAWING

PRODUCT: MK2 4132 RH Wing Assy Part Numbers

DRAWN BY: Phil.W
DATE: 4/10/2010

A3860R - ASSY



Parts List

ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	MK2 Wing Disc Coupler Beam Assembly	A3861 / A1
2	5	150mm 14Inch Disc Pod Assembly	A28081

AITCHISON INDUSTRIES

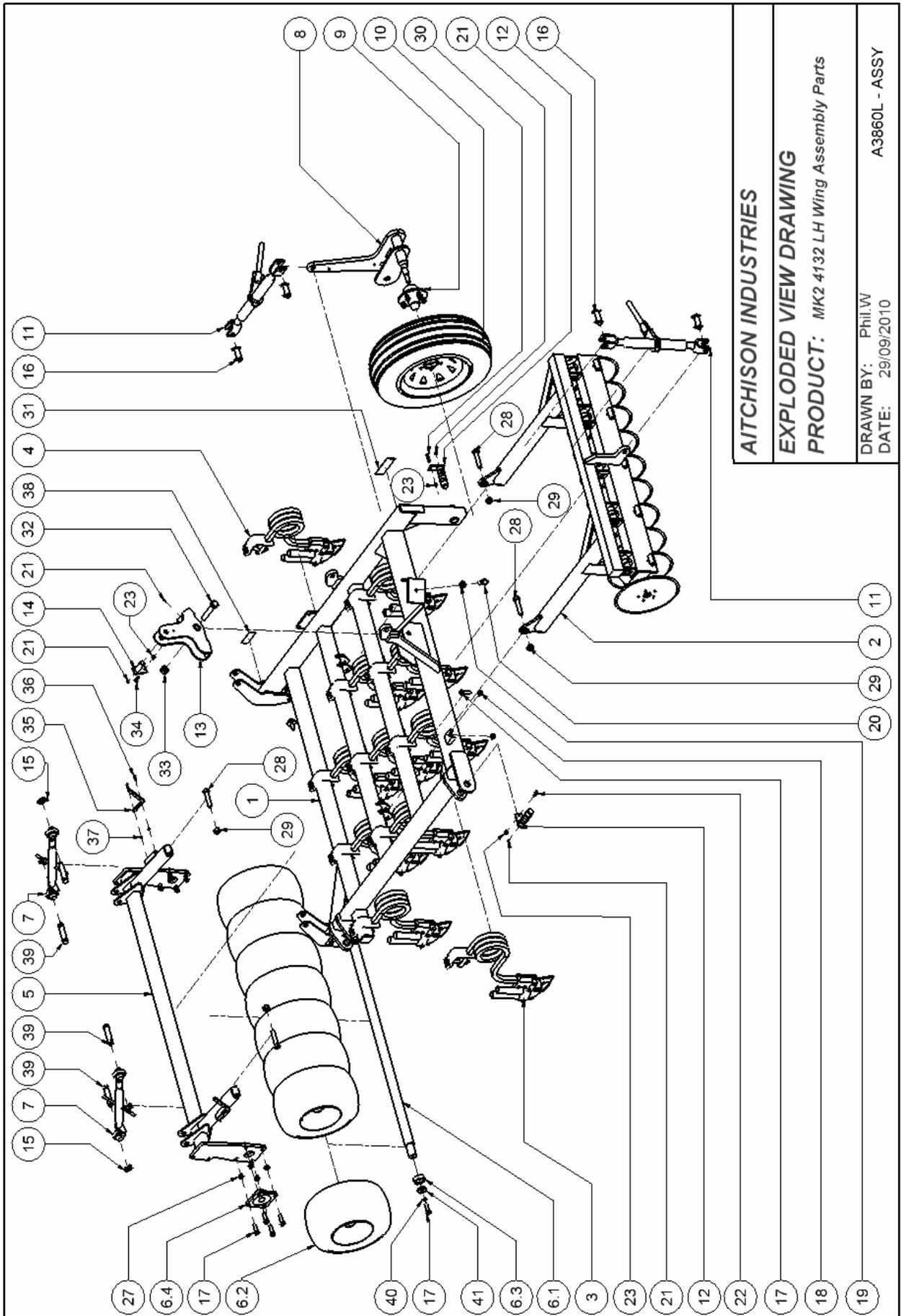
EXPLODED VIEW DRAWING

PRODUCT: MK2 4132 Wing Disc Coupler Assembly

DRAWN BY: Phil.W

DATE: 29/09/2010

A3861 / ASSY



AITCHISON INDUSTRIES

EXPLODED VIEW DRAWING

PRODUCT: MK2 4132 LH Wing Assembly Parts

DRAWN BY: Phil.W

DATE: 29/09/2010

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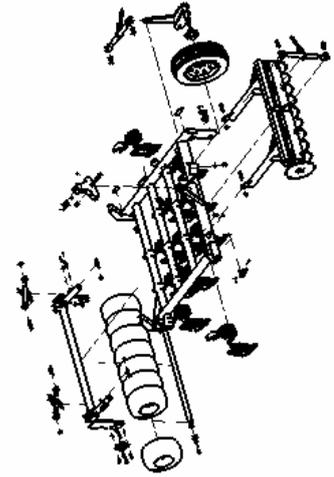
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ITEM		PART NUMBER		DESCRIPTION		ITEM		PART NUMBER	
QTY	DESCRIPTION	DESCRIPTION	DESCRIPTION	QTY	DESCRIPTION	QTY	DESCRIPTION	QTY	DESCRIPTION
1	MK2 LH Wing Frame Assembly	A3860L		2	M16 Nut	18		2	M16 Nut
1	MK2 Wing Disc Coupler Assembly	A3861 / ASSY		1	M20 Nut	19		1	M20 Nut
3	25mm LH Centre Double Coupler Tine Assembly	A3548		1	M20 x 55 Bolt	20		1	M20 x 55 Bolt
4	25mm RH Centre Double Coupler Tine Assembly	A3549		5	M6 Stright Grease Nipple	21		5	M6 Stright Grease Nipple
1	MK2 Wing Roller Frame Assembly	A3863		2	M10 x 35 Bolt	22		2	M10 x 35 Bolt
1	Wing Roller	See Below		4	M10 Nylock Nut	23		4	M10 Nylock Nut
1	MK2 Wing Roller Axle	A38521		8	M16 Nyloc Nut	27		8	M16 Nyloc Nut
8	18.5 x 8.50 x 8 Wheel (50.5mm) Bore	A38522		4	M20 x 90 Bolt	28		4	M20 x 90 Bolt
2	MK2 Roller Axle Spacer	A38523		4	M20 Nylock Nut	29		4	M20 Nylock Nut
2	UCF 208 Bearing / Housing	92242 / 92241		1	M10 x 40 Bolt	30		1	M10 x 40 Bolt
2	Turnbuckle	A23189-01		1	Decal - Depth Gauge	31		1	Decal - Depth Gauge
1	LH Wing Depth Wheel Mount Assembly	A3512L		1	M24 x 130 Bolt	32		1	M24 x 130 Bolt
1	Trojan 5 Stud Hub	A3866L		1	M24 Nut	33		1	M24 Nut
1	14" Wheel Assembly	TRO82030		1	M10 x 30 Bolt	34		1	M10 x 30 Bolt
2	Ratchet Link	A23184		2	MK2 Roller Depth Gauge Pointer	35		2	MK2 Roller Depth Gauge Pointer
3	MK2 Wing Pivot Pin Assembly	A23127		4	M6 x 25 Bolt	36		4	M6 x 25 Bolt
1	MK2 Wing Float Plate Assembly	A3862		4	M6 Nylock Nut	37		4	M6 Nylock Nut
1	MK2 Wing Float Plate Pin Assembly	A3865		2	MK2 Roller Depth Decal	38		2	MK2 Roller Depth Decal
4	11mm Linch Pin	A3864		4	Top Link Pin B1200	39		4	Top Link Pin B1200
4	Ratchet Link Pin / Clip	A2645 / A2646		2	16mm Spring Washer	40		2	16mm Spring Washer
11	M16 x 50 Bolt	8616H		2	MK2 Roller Wheel Retainer Washer	41		2	MK2 Roller Wheel Retainer Washer



AITCHISON INDUSTRIES

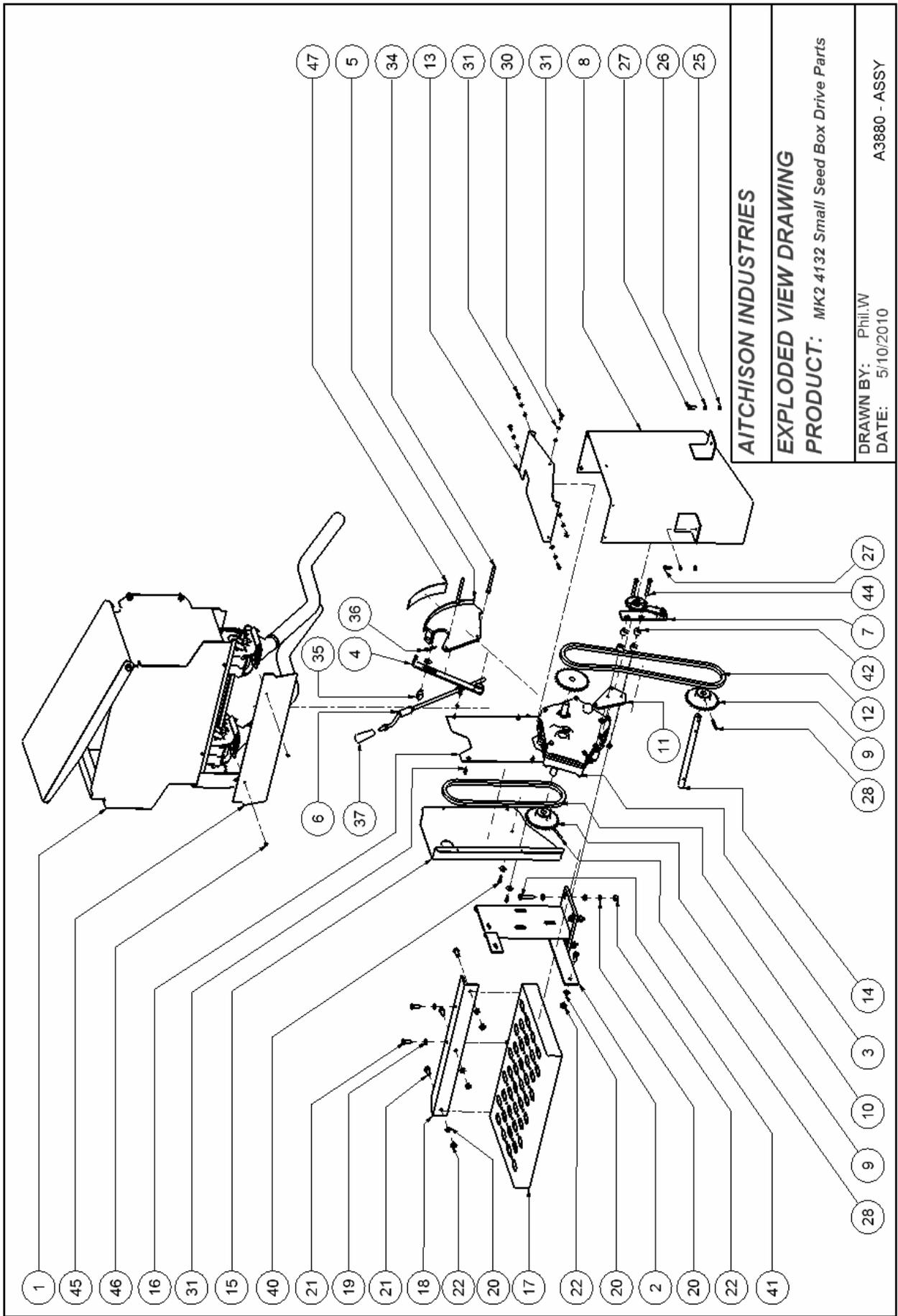
EXPLODED VIEW DRAWING

PRODUCT: MK2 4132 LH Wing Assy Part Numbers

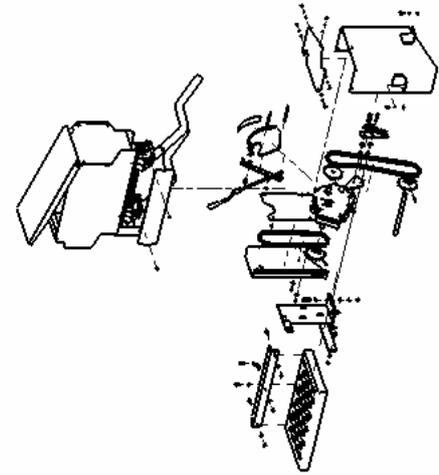
DRAWN BY: Phil.W

DATE: 29/09/2010

A3860L - ASSY



Parts List		Parts List	
ITEM	QTY	DESCRIPTION	DESCRIPTION
1	1	Small Seed Box and Parts Assembly	A3880 / ASSY
2	1	MK2 Gearbox Mounting Plate	A3881
3	1	3000 Series Gearbox Assembly	A2342
4	1	Gearbox Calibration Pointer Assembly	A3570-04
5	1	MK2 Gearbox Calibration Mount Assembly	A3876
6	1	Seed Adjustor Lever Assembly	A2333
7	1	1/2" Floating Chain Tensioner	A2350
8	1	MK2 DL to GB Cover Assembly	A3882
9	3	27T Sprocket Half Inch Pitch	A2322-01
10	1	MK2 GB to SSB Drive Chain	A3880CH-01
11	1	MK2 Gearbox Input Tensioner Mount	A3883
12	1	MK2 Drive Chain DL to GB	A3880CH-02
13	1	MK2 DL to GB Cover Top	A3884
14	1	MK2 Small Box Lay Shaft	A3885
15	1	MK2 Gearbox To Hopper Cover	A3886
16	1	MK2 Gearbox To Hopper Inner Cover	A3887
17	1	Rear Centre Tread Board	A3700-54
18	1	MK2 Small Box Treadboard Stiffener	A3888
19	4	10 mm Flat Washer	9042
20	14	10mm Spring Washer	9041
21	7	M10 x 25 Bolt	8418H
22	14	M10 Nut	9141
23	3	M10 x 30 Bolt	8415H
24	12	10mm HD Flat Washer	9040



AITCHISON INDUSTRIES

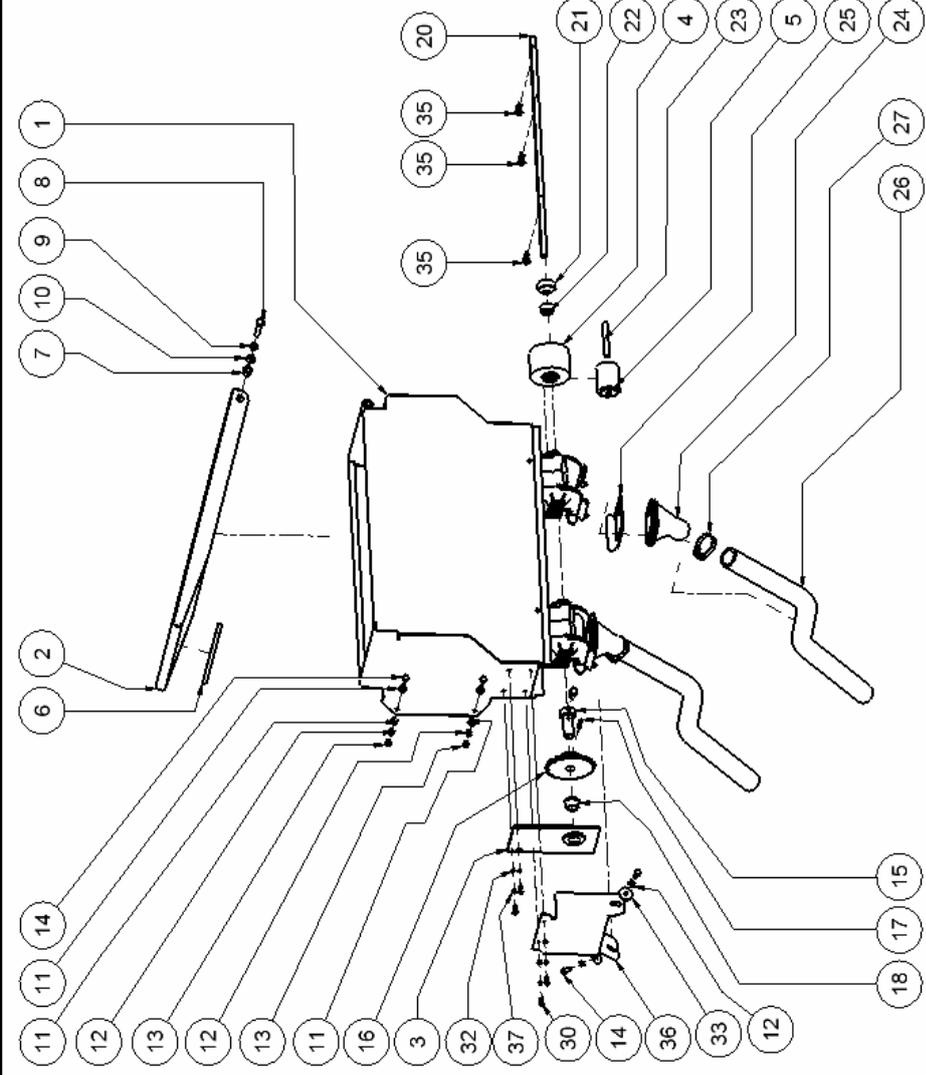
EXPLODED VIEW DRAWING

PRODUCT: MK2 4132 Small Seed Box Drive Part NO:

DRAWN BY: Phil.W
DATE: 5/10/2010

A3880 - ASSY

Parts List			
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Small Seed Box Assembly	A3572
2	1	Small Seed Box Lid Assembly	A3573
3	1	Small Seed Box Drive Plate Assembly	A3574
4	2	Large Drive Roller	A2292-09
5	2	Small Idler Roller	A2292-05
6	1	Buffer Pad	A2375
7	2	S 206 Bush	A2355
8	2	M10 x 60 Bolt	8422H
9	2	10mm Spring Washer	9041
10	2	10 mm Flat Washer	9042
11	8	8mm Flat Washer	9031
12	6	8mm Spring Washer	9030
13	4	M8 Nut	9106
14	6	M8 x 20 Bolt	8311H
15	1	Small Seed Box Drive Axle	A3570-01
16	1	27T Sprocket 1/2" Pitch 7/8" Inch Bore	A23130
17	1	6 x 50 Roll Pin	9262
18	1	S 15 Bush Cut Down to 15mm	A2352
20	1	Small Seed Box Drive Shaft	A3570-03
21	2	Cam 16mm Wide	A2292-04
22	4	Fert Unit Shaft Bush	A2292-06
23	2	Small Idler Roller Axle	A2292-11
24	2	Fert Cup Angled	A2290-13
25	2	Cup Plate - Plastic Fert Unit	A2292-12
26	2	35mm Seed Dropper Hose p/m	A2384-01
27	2	Crey Clip 35mm	A2370
35	3	R Clip 3mm S/S AG6SS	9292
30	4	M6 x 16 Bolt	8208H
32	4	6mm Flat Washer	9033
33	2	8mm Fender Washer	9032
34	1	M10 x 25 Bolt	8418H
36	1	Small Seed Box End Cover	A3570-02
37	4	6mm Spring Washer	9021



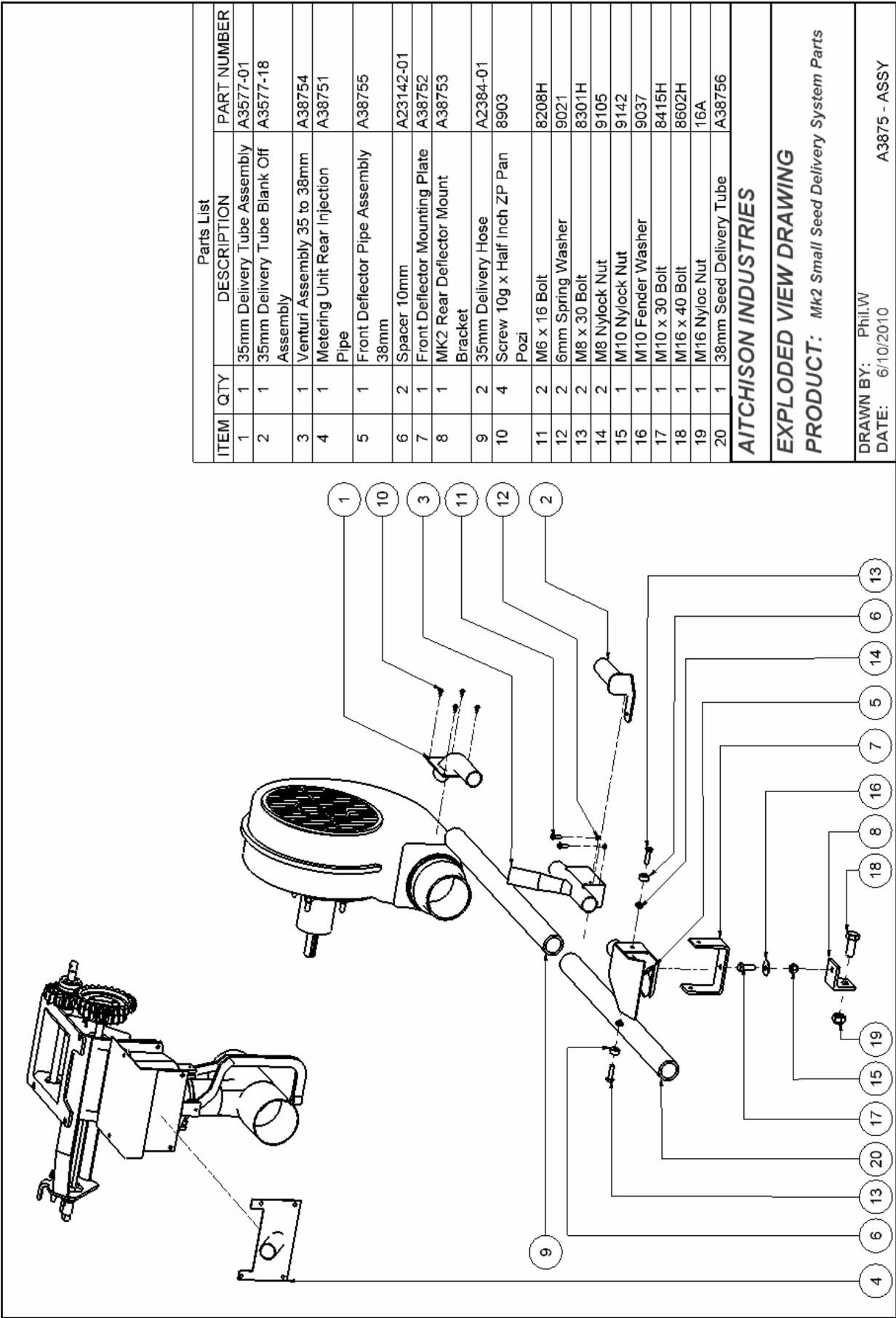
AITCHISON INDUSTRIES

EXPLODED VIEW DRAWING

PRODUCT: Airpro 4132 Small Seeds Box

DRAWN BY: Phil
DATE: 5/09/2006

A3880 / ASSY



Parts List			
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	35mm Delivery Tube Assembly	A3577-01
2	1	35mm Delivery Tube Blank Off Assembly	A3577-18
3	1	Venturi Assembly 35 to 38mm	A38754
4	1	Metering Unit Rear Injection Pipe	A38751
5	1	Front Deflector Pipe Assembly 38mm	A38755
6	2	Spacer 10mm	A23142-01
7	1	Front Deflector Mounting Plate	A38752
8	1	MK2 Rear Deflector Mount Bracket	A38753
9	2	35mm Delivery Hose	A2384-01
10	4	Screw 10g x Half Inch ZP Pan Pozi	8903
11	2	M6 x 16 Bolt	8208H
12	2	6mm Spring Washer	9021
13	2	M8 x 30 Bolt	8301H
14	2	M8 Nylock Nut	9105
15	1	M10 Nylock Nut	9142
16	1	M10 Fender Washer	9037
17	1	M10 x 30 Bolt	8415H
18	1	M16 x 40 Bolt	8602H
19	1	M16 Nyloc Nut	16A
20	1	38mm Seed Delivery Tube	A38756

AITCHISON INDUSTRIES

EXPLODED VIEW DRAWING

PRODUCT: Mk2 Small Seed Delivery System Parts

DRAWN BY: Phil.W
DATE: 6/10/2010

A3875 - ASSY

METERING UNIT PART NUMBERS

1	LH of Turnstile	A3544-01	39	Bearing 6009-2rs	A3544-54
2	RH of Turnstile	A3544-02	40	Safety Ring 75	A3544-37
3	Covering	A3544-03	41	Safety Ring 45	A3544-38
4	Cylinder	A3544-04	42	M6 Washer	9023
5	Cover	A3544-05	43	M6 Washer	9022
6	Curtain	A3544-06	44	Flexible Pin 4x32	A3544-33
7	Pin	A3544-07	45	M6 Washer	9022
8	Door	A3544-08	46	Washer 17	A3544-46
9	Wheel 19 Teeth	A3544-09	47	Metal Bullet 6.35	A3544-47
10	Scraper Rubber	A3544-10	48	Screw M3.5x16	A3544-48
11	Shaft	A3544-11	49	Washer 5.3	A3544-49
12	Brush	A3544-12	50	M8 Nut	9106
13	Sleeve	A3544-13	51	Washer 9	9032
14	Arm	A3544-14	52	Bearing 6002-2rs	A3544-55
15	Cup	A3544-15	53	Safety Ring 15	A3544-39
16	Screw	A3544-41	54	Screw M3.5x13	A3544-53
17	Bearing ay15- 2rs	A3544-59	55	Bracket	A3544-21
18	Shaft	A3544-16	56	Half-moon	A3544-22
19	Flap	A3544-17	57	El. Hectare meter	A3544-23
20	Bold	A3544-18	58	Flexible Pin 2x16	A3544-32
21	Mark	A3544-19	59	Screw M3x6	A3544-50
22	Bush	A3544-20	60	Wheel 19 Teeth	A3544-09
23	M8 x 35 Bolt	8310H	61	Turnstile Complete	A3544
24	M8 x 160 Bolt	8319H	62	Wheel 14 Teeth	A3544-26
25	M8 x 40 Bolt	8309H	63	Wheel 28 Teeth	A3544-27
26	M4 x 20 Screw	8200H	64	M6 x 20 Bolt	8205H
27	M6 x 20 Bolt	8205H	65	M6 Washer	9022
28	M6 x 18 Screw	8221H	66	M6 Nut	9121
29	M6 x 20 Bolt	8205H	67	M18 Nut	to-202106
30	M8 Nut	9106	68	Cover AL	A3544-28
31	M5 Nut	9102	69	Screw M2.2x6	A3544-57
32	Flexible Pin 6x36	A3544-34	70	Rotary Brush	A3544-29
33	Flexible Pin 6x45	A3544-35	71	Washer 17	A3544-46
34	Safety Ring 47	A3544-42	72	Bearing	A3544-56
35	Safety Ring 25	A3544-73	73	Flexible Pin 5x25	A3544-31
36	Bearing 6005-2rs	A3544-38	74	Thrust Spring	A3544-30
37	Flexible Pin 5x50	A3544-36	75	Washer 4.3	A3544-52
38	Screw M3.9 x 22	A3544-45	76	M6 x 20 Bolt	8205H