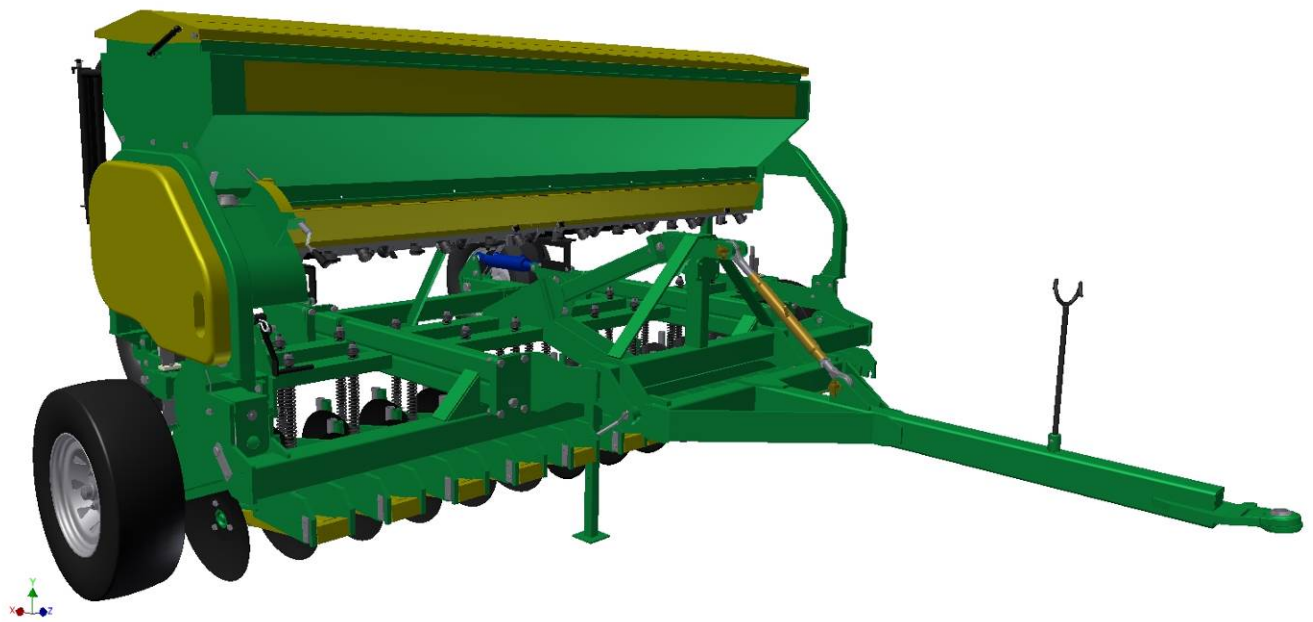


AITCHISON SEEDMATIC

40/4128 D Series

DRILLS

Concave Disc Openers



REESE ENGINEERING LTD

41 KELVIN GROVE ROAD – PO BOX 5056
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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, ensuring proper seedling germination, leading to superior crops and thus greater revenue earning potential.

It has often been said: “when all else fails-read the operator’s 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

**Director
Reese Agri**



WARNING

THE OPERATION AND ADJUSTMENT OF THE REESE MACHINE REQUIRES A COMPLETE KNOWLEDGE OF THE CONTENTS OF THIS HANDBOOK. TO AVOID PERSONAL INJURY PLEASE ENSURE THAT ALL PERSONNEL ARE THOROUGHLY CONVERSANT WITH ALL DETAILS BEFORE COMMENCEMENT OF OPERATION OR MAINTENANCE.

WARRANTY

COMPLETE AND RETURN WARRANTY REGISTRATION TO ENSURE VALIDATION

IN THE USA RETURN TO: REESE AGRI USA, 705.N MAIN STREET, BRAYMER, MISSOURI, 64624, USA.
IN AUSTRALIA AND NZ RETURN TO: REESE ENGINEERING LTD, PO BOX 5056, PALMERSTON NORTH, NEW ZEALAND

REESE warrants that the Machine delivered shall conform to the specifications set out in this Handbook.

REESE makes no warranty of saleability or fitness for a particular use, nor is there any other express or implied warranty.

Subject to such other conditions, warranties, and/or undertakings which may apply from time to time under any applicable law, REESE warrants with respect to each new AITCHISON Machine sold by its accredited agents, that for a period of twelve months from the dates of original retail sale, REESE will repair or replace free of charge any part found to be defective in factory materials or workmanship under normal use and operation within the United States of America, Canada, Australia and New Zealand provided that;

1. The Machine

- (a) has been properly assembled and adjusted
- (b) has been properly used and operated within the capacity and operating limitations specified by the manufacturer thereof, and
- (c) has been properly maintained and cared for.

2. This Warranty applies to direct purchase from an authorized AITCHISON dealer. If any defect or fault shall arise such purchaser must return the defective work or Machine to an authorized AITCHISON Dealer within ten working days of such defect or fault arising.

3. In the event of the purchaser attempting to repair or replace the work or product without prior written consent of an authorized AITCHISON Distributor this guarantee shall become void. REESE may replace or repair any damaged product or work at its discretion.

4. In respect of such Machine this warranty does not apply to:

- (d) misuse or carelessness in handling,
- (e) Non-compliance to REESE's operating and maintenance instruction,
- (f) Unauthorized repairs or alterations,
- (g) Consequential damage resulting from misuse or initial faults,
- (h) Parts subjected to wear or damage as a result of normal operation i.e.
 - i. Sponge pads and discs
 - ii. Tines and boots
 - iii. Discs
 - iv. Tyres
 - v. Hydraulic components

5. Any disputes in relation to this contract or product shall be governed by New Zealand law and shall be determined in New Zealand court.

TO THE OWNER AND OPERATOR

Your Aitchison Drill was 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: _____

The warranty card on your Seedmatic 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.

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.

TECHNICAL SPECIFICATIONS

| Model | 4028T | 4128CT |
|---|-------------------------|------------------------|
| Transport Width | 4.20m 13.5ft | 4.20m 13.5ft |
| Sowing Width | 3.50m 11.5ft | 3.50m 11.5ft |
| Height | 1.750m 5.7ft | 1.750m 5.7ft |
| Weight Empty | 1840kg 4057lb | 2010kg 4431lb |
| Length | 4.60m 15.0ft | 4.60m 15.0ft |
| Seed Capacity | 1000lt 28.4bu | 665lt 18.8bu |
| Fertiliser Capacity | N/A | 690lt 19.5bu |
| Number of Coulters & row spacings | 28 Rows @ 125mm / 5" | 28Rows @ 125mm / 5" |

Optional Accessories:

Bin level indicator; A3083

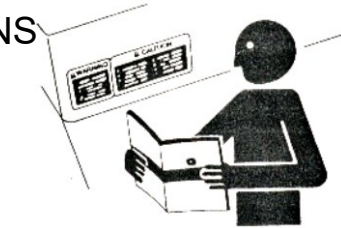
Hydraulic Kit for Drawbar; A3129

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 and on your machine safety signs. Replace missing or 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's dealer.

OPERATE YOUR MACHINE SAFELY

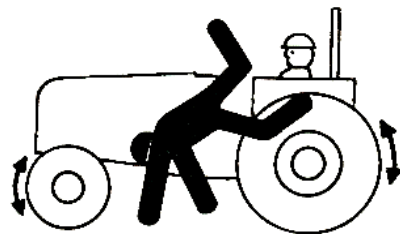
Be careful when operating machine to avoid injury.

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 planter are in operation. Keep riders off. 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.

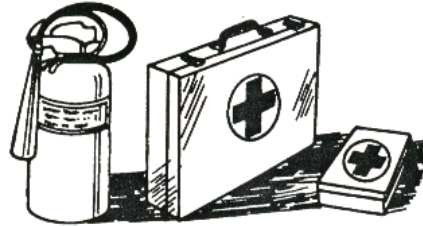


Operating equipment safely requires the full attention of the operator. Do not wear radio headphones while operating machine.

BE SAFE WITH CHEMICALS

Direct exposure to agricultural and hazardous chemicals can cause serious injury. Potentially hazardous chemicals used with Aitchison equipment includes 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.

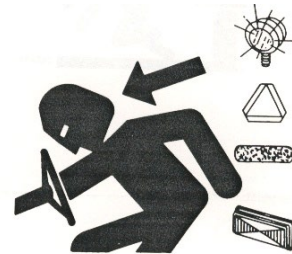
Keep a fire extinguisher and first aid kit handy



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 DEVICE

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.

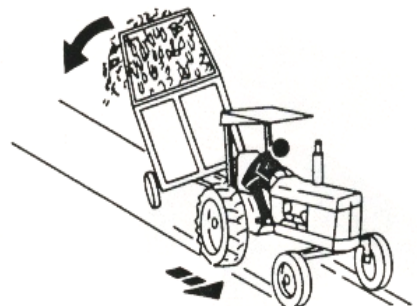
Reduce speed over rough ground

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 road marking 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 the 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 build-up 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.

GENERAL OPERATION IN THE FIELD

When the drill is in work in the field, adjust the top link to make the frame level and the sway chains to give 75-100mm (3-4") lateral movement. The tractor hydraulics should be set to allow the drill to float over the terrain unimpeded by the movement of the tractor. Adjust the depth wheels evenly on both sides to give the required opener penetration. In extremely hard conditions it is permissible to weigh the front of the drill to aid 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 (5 mph) may be maintained.

Always lift the drill out of the ground before turning sharp corners as this will protect the 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 Discs 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 chains or bar harrows behind the drill is very beneficial as this will crumble the groove and help to cover the seed.

PASTURELAND FARMING WITH SEEDMATIC

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.

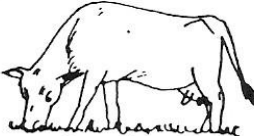
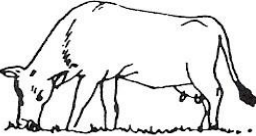
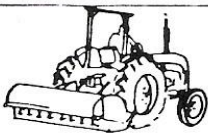


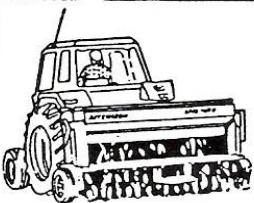
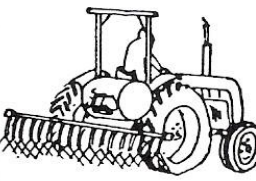
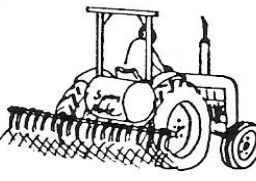
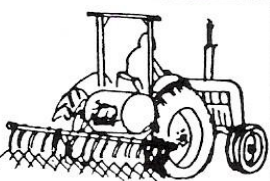



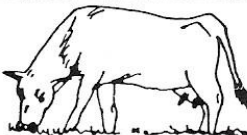
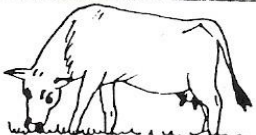
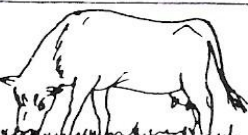
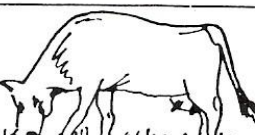
TECHNIQUES AND TIMING FOR PASTURE RENOVATION

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

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

* 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 (26 lb/acre) 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. This factor is an important feature of the Seedmatic.

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 THE SEEDMATIC AND GRASSFARMER.

We are not in a position to give total formal recommended seeding rates, chemical usage and fertiliser recommendations because of 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 can be disappointing, but grain after legume or brassica is outstanding.

Here are just a few possibilities:

Brassicas, Turnips, Swedes, Legumes – Can be sown 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. Existing Herbage control should be carried out.

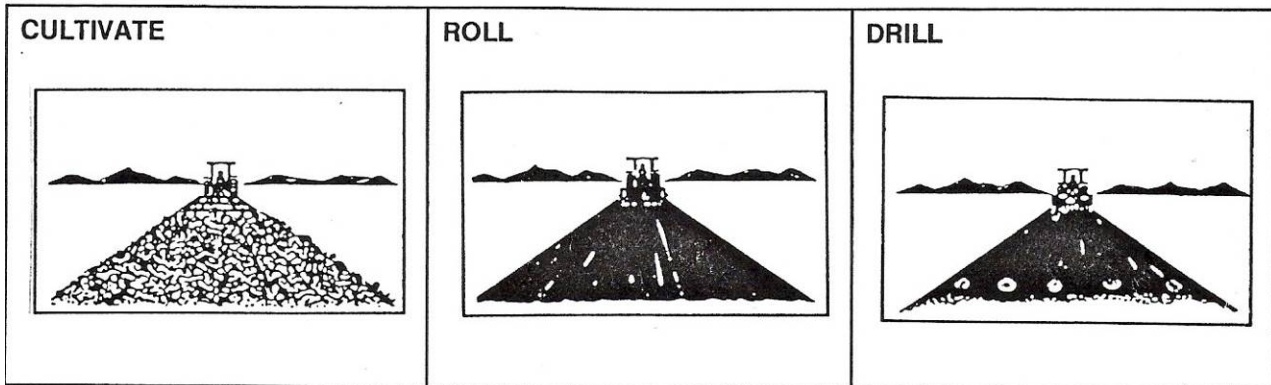
Wheat and Barley – Direct seeding in early spring or autumn depending on variety. Always spray out pasture with approved herbicide (may not be necessary after brassica). Always sow with fertiliser.

Lucerne, Alfalfa – Sow in spring after spraying out entire area with Roundup or similar herbicide. 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. Apply fertiliser and ensure that spraying and baiting for insects is carried out – particularly for control of slugs and snails.

Green-feed Maize – Carry out in spring and the same rules apply as with wheat, barley and oats. You may wish to seed in 30 or 45 cm (12" or 18") 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 Disc Coulter 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, 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.



We recommend that a chain harrow be towed behind the seed drill or roll the field after seeding has been completed.

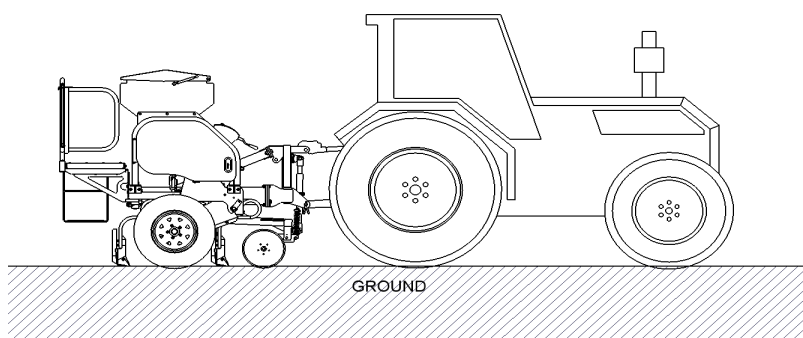
SETTING UP THE SEEDMATIC FOR USE

Connecting drill to tractor; 3 Point Linkage Models.

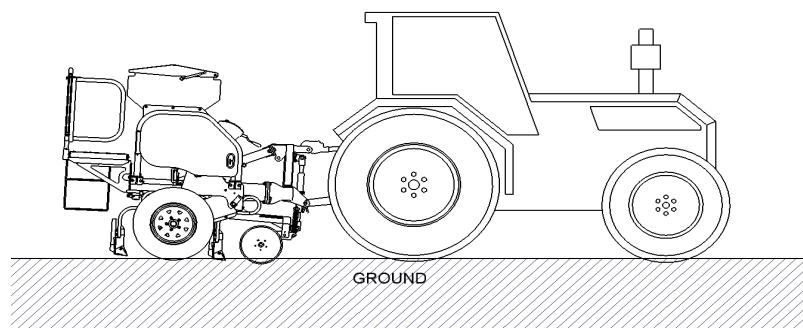
Connect the Seedmatic drill to the rear 3-point linkage of your tractor. Adjust the tractors top link arm so the drill frame is sitting parallel with the ground. Adjust the tractors sway chains to give 75-100mm lateral movement. The tractors hydraulics should be set to allow the drill to float over the terrain unimpeded by the movement of the tractor.



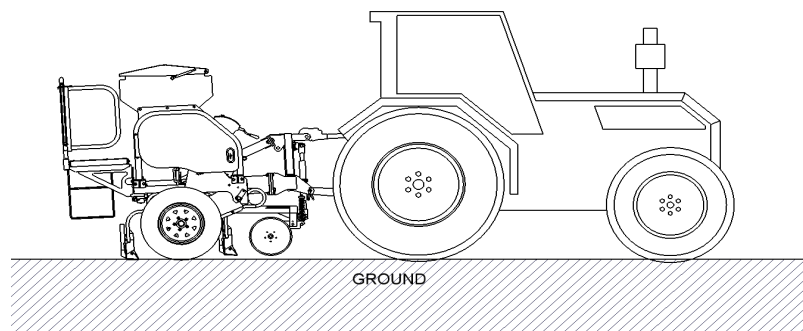
**Correct
Seedmatic
sitting level**



**Seedmatic
leaning to
far forward**



**Seedmatic
leaning to
far back**



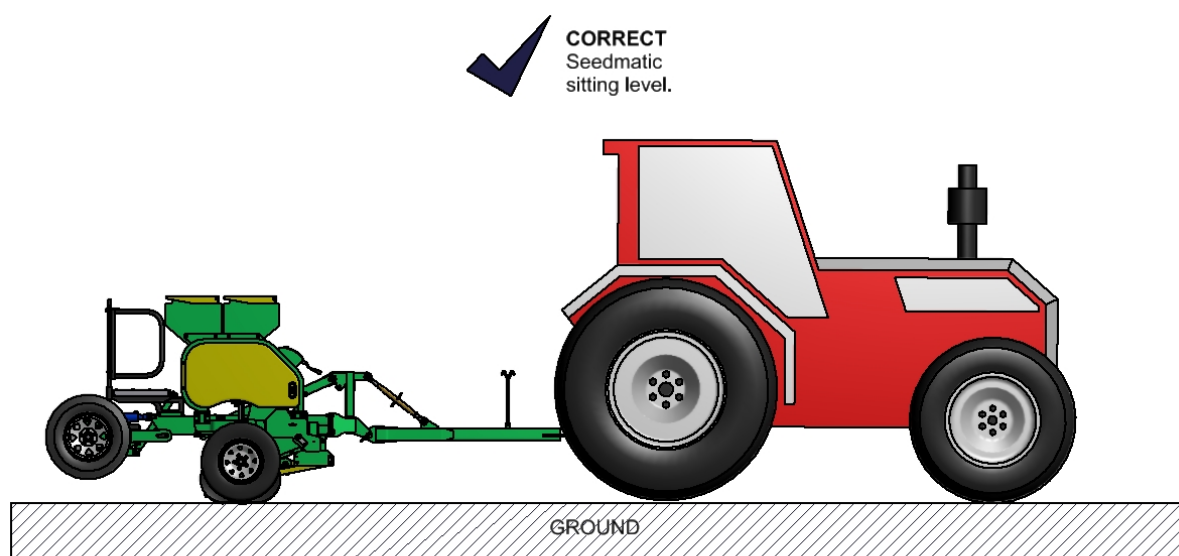
Connecting drill to tractor; Trailed Models.

Connect the Seedmatic Drawbar to the tractor's Towbar. Make sure you use a safety clip on the drawbar pin.

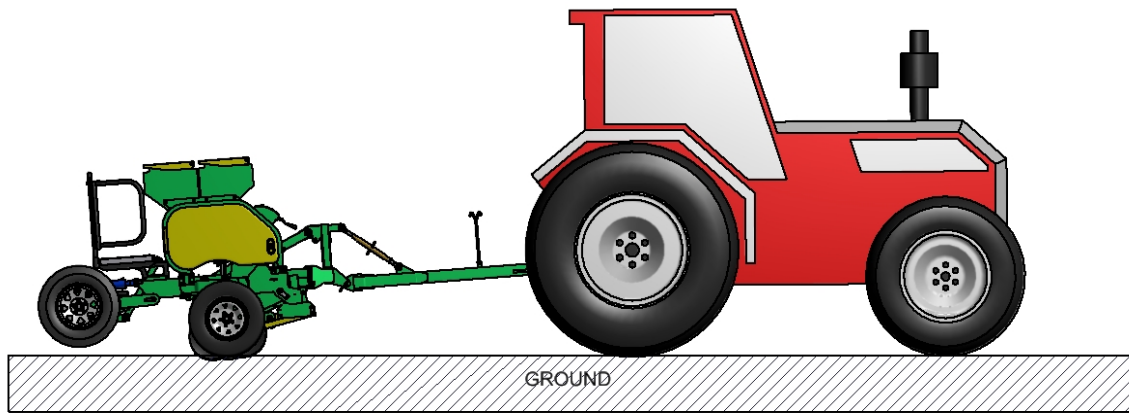
If you are to travel on public roads, ensure you fit a **SAFETY CHAIN** between the Seedmatic Drawbar and the tractor's Towbar.

Connect the Seedmatic's hydraulic hoses to one of the tractor's hydraulic banks. This hydraulic system is used to raise and lower the rear transport wheels on the Seedmatic.

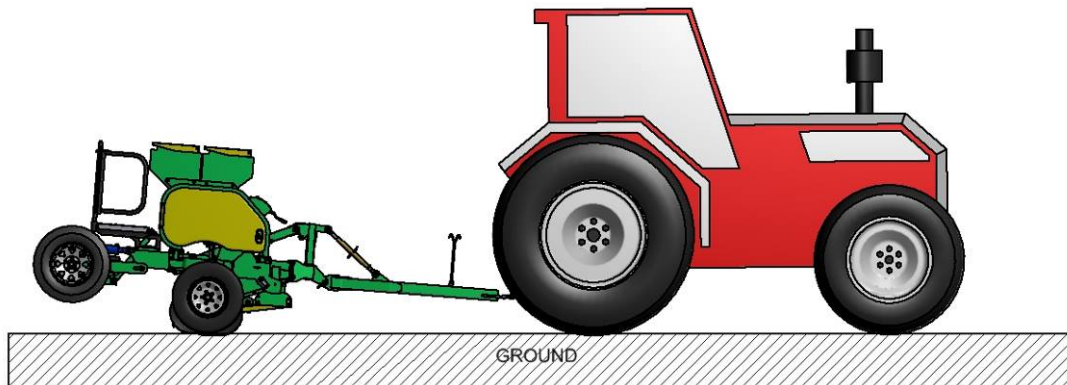
When seeding the rear transport wheels should be fully raised clear of the ground. Adjust the Drawbar top link to ensure that the Seedmatic drill frame is sitting parallel with the ground.



X Seedmatic
leaning to
far back.



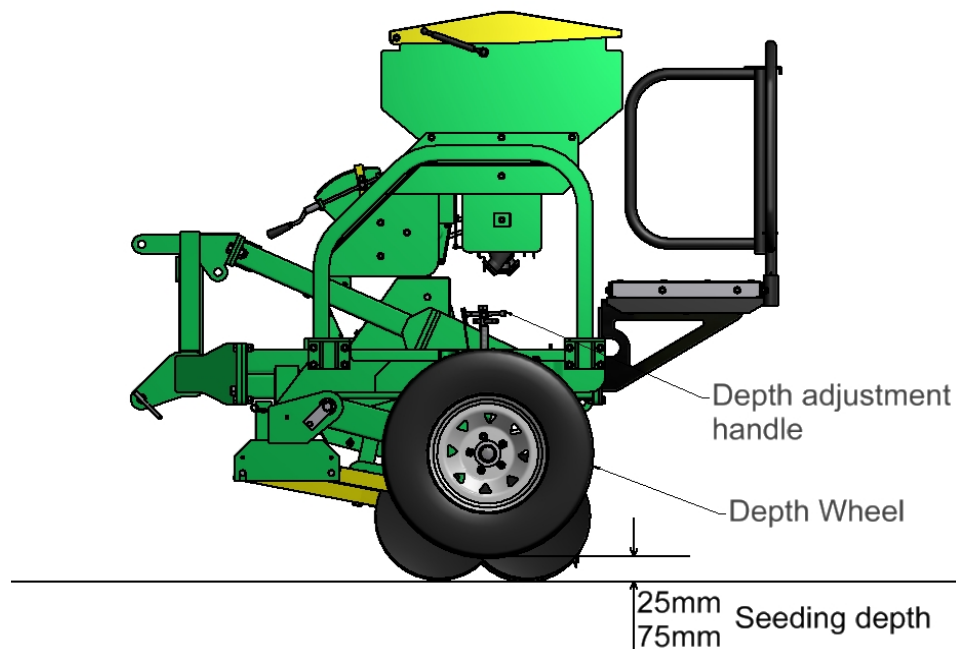
X Seedmatic
leaning to
far forward.



SETTING THE DEPTH WHEELS

With the Seedmatic sitting on hard flat ground, the depth wheels should be 25-75mm clear of the ground, depending on your desired seeding depth. There is an adjustment handle at the top of each depth leg, use this to adjust the legs.

There is a depth gauge at the top of each depth leg, check that both depth legs are set at the same height



When the drill is in work, the best way to check your seeding depth is to have a scratch around in the seed slots behind the drill and check where the seeds are placed in the soil. Make the appropriate adjustments as needed.

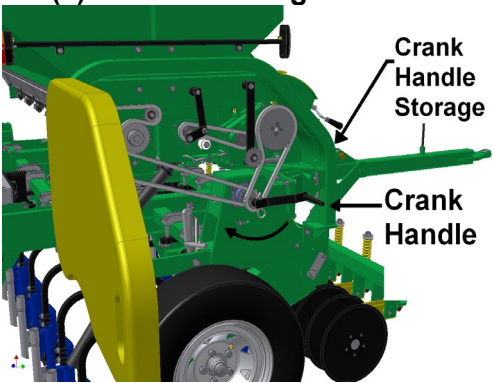
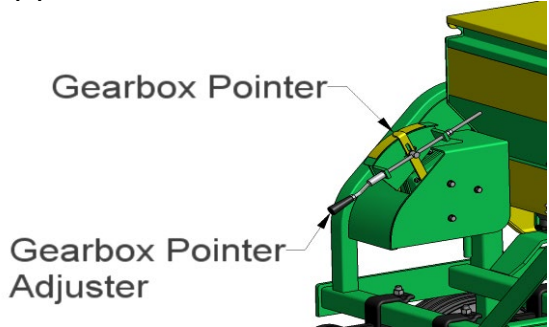
At times we recommend that a chain harrow or light roller is towed behind the Seedmatic to help cover the seed slots. This will help prevent bird strike and can aid in seed germination.

CALIBRATING THE DRILL TO CHECK THE SOWING RATE

NOTE: When new, the Seed Pads may have a white powder (chalk dust) on them. This is to prevent them from sticking together during manufacturing. This chalk dust can impede your seeding rate until it has been removed or until it dissipates. This can be done by hand, or over time by using the seed drill.

By Hand: This can be achieved by sliding the Seed Pad away from the Housing and dusted off the powder.

Dissipates: **Simply using the Seed Drill.** (The seeding rate will slowly increase as the chalk dust dissipates. (Usually within the first hour of use.) **RE-CALIBRATE.**

| | |
|--|---|
| <p>(1) Prime:</p> <p>Place seed in the hopper over any 5 adjoining outlets. Rotate the Crank Handle until a steady flow of seed can be witnessed falling from the seed outlets.</p> <p>Set the Gearbox pointer in the appropriate position for you desired seed sowing rate. (See Seed Chart under hopper lid.)</p> | <p>(2) Seed Catchment:</p> <p>Place the Calibration Tray under the 5 appropriate Seed metering Units to catch the metered seed.</p> <p>Another method is to pull the black seed dropper hose off the 5 appropriate Coulter Tubes and place them in a bag or container.</p> |
| <p>(3) Seed Metering:</p>  <p>Rotate Crank Handle Clockwise 29 times.</p> | <p>(4) Weigh Seed:</p> <p>Catch and weigh the total amount metered through the 5 metering units. (in grams).</p> <p>NOTE: Remember “TARE” scales before weighing; for the weight of the bag or container.</p> |
| <p>(5) Conversion:</p> <p>Divide the weight measured by 3 to establish kilograms per hectare.</p> <p>ie: 45 grams / 3 = 15kg/ha</p> | <p>(6) Check:</p>  <p>If above or below the desired rate, make the necessary adjustment via the Gearbox Pointer Adjuster. RECALIBRATE</p> |

Follow the above steps to calibrate the Fertiliser Hopper.

LAYMAN'S GUIDE TO SEEDING VARIANCE

The Aitchison Sponge Seed Delivery System is a highly accurate, consistent and gentle method for delivery of seeds. We are pleased you chose to make use of our technology. To get started, we have created the attached seed charts. They are guides that will in many cases allow you to start with reasonable accuracy.

Along with these charts you will also need to know how to compensate for variations in seeds. We are fortunate to have many companies that are constantly providing new varieties of seed; however, this also makes any seed chart a GUIDE ONLY. Use the rules listed below when suitable, and when you need more accuracy consider the following:

The seed count may be different; the coatings on the seed may be different; the humidity can be different; the seed size due to cultivars may be different; the moisture content of the seeds may be different; the seed may be husked or still have its beard; and other differences which could affect the seeding rate.

Example

Temperate charts were calibrated for Ryegrass. Line 1 on Range 1 was calibrated at an ambient temperature of 64°F (18°C). Moisture content of the seed was 14%. The 1000 seed count was 0.07 ounce (2 grams) and the seeds were approx ¼" long (6.6mm) by 1/16" wide (1.5mm). There were no coatings or dressings and was cleaned of gin trash.

Note also that all seeds used on original chart were uncoated.

As it is unlikely your sample will directly match the above we suggest calibration at all times. Below are some general guidelines on what influences will affect you seeding.

SEED SIZE: Small seeds flow faster

SEED COATING: Fungicides that are dull and sticky will slow seeding rates.

TEMPERATURE: Cold will slow seeding rates, heat will increase seeding rates.

HUMIDITY: High humidity slows sowing rates, dry increase sowing rates.

SEED MIXTURE: Sowing small round seeds with flat long seeds, i.e. ryegrass and clover, the rate of the small seeds could significantly increase.

WHEEL DIAMETER: On cultivated soil slippage will reduce sowing rate.

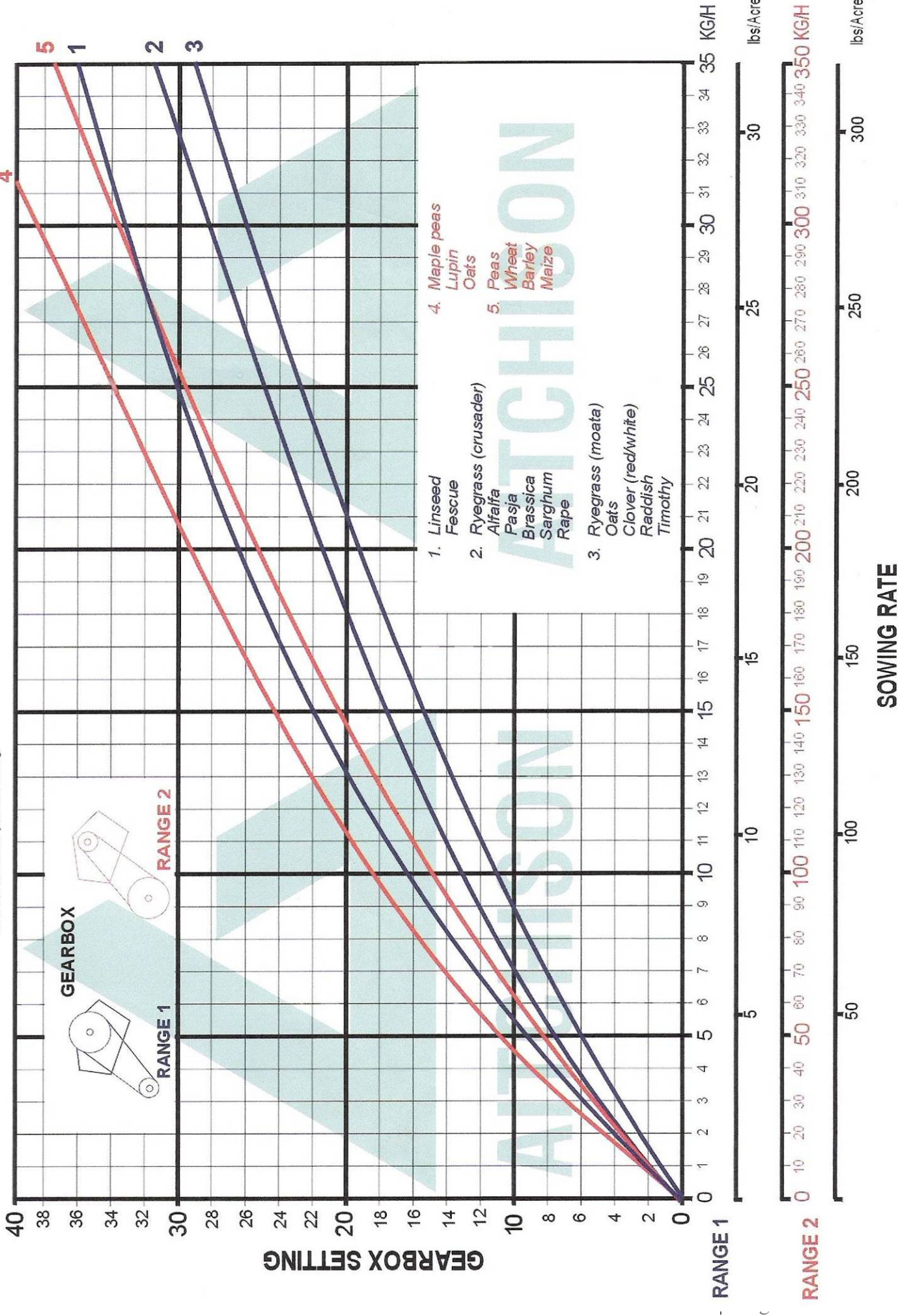
RECORD PREVIOUS RESULTS: Keep a note book and record for future reference, mixtures, conditions and setting chosen.

Think in four quarters not the whole paddock. When the hopper runs out (1/4 paddock) check your rate back from the area covered.

REMEMBER: ALWAYS CALIBRATE BEFORE SEEDING!!!

TEMPERATE SEEDS

NOTE: This chart is a **GUIDE ONLY** and different seed lines within a species can have markedly different results. Therefore calibration is recommended as the only truly accurate way of obtaining the desired sowing rate for the seed you are using



DIFFICULT SEEDS TO SOW

There are a number of seeds that are difficult to sow due to their physical shape and weight.

These include:

- Prairie Grass
- Buffel Grass
- Callida Rhodes Grass
- Unclipped oats

If seeds adhere to the sponge pad, fit the oat wiper (Part # A2366). If there are problems with large seeds failing to pick up with the sponge it will be necessary to fit the bean spacers (Part # A2365-01) which space out the pads leaving a greater surface to pick up seed.

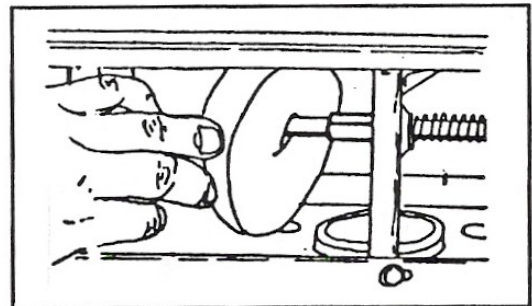
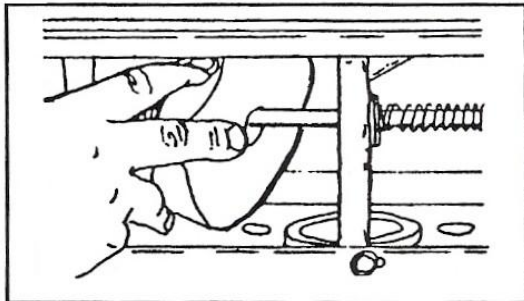
OAT WIPER AND BEAN SPACER

Bean Spacer (Optional)

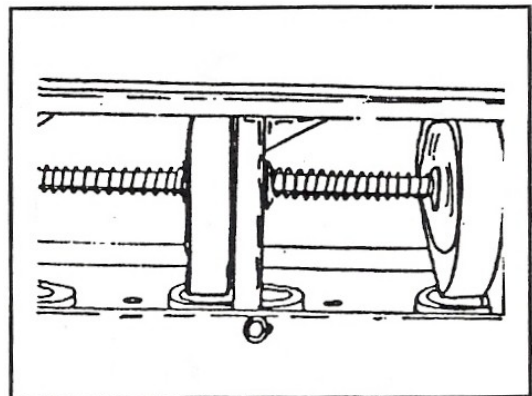
When sowing large smooth seeds such as beans markedly improved seeding performance is achieved by fitting spacers between the sponge and the seeder casting. This in effect moves the sponge away from the seeder casting and allows for better entry of the seeds into the sponge. A better 'pick up' is attained and seeding consistency is improved.

Also, to decrease the advent of intermittency and improve seed spacing it is advisable to use the seeder agitator set on maximum spring pressure.

To fit the spacers, follow these instructions:



1. Pull the sponge away from the seeder casting.
2. Fit the Bean Spacer between the sponge pad and the seeder unit.
3. Allow the sponge pad to return to the seeding position with approx. 3mm (1/32") between the sponge pad and seeder unit.



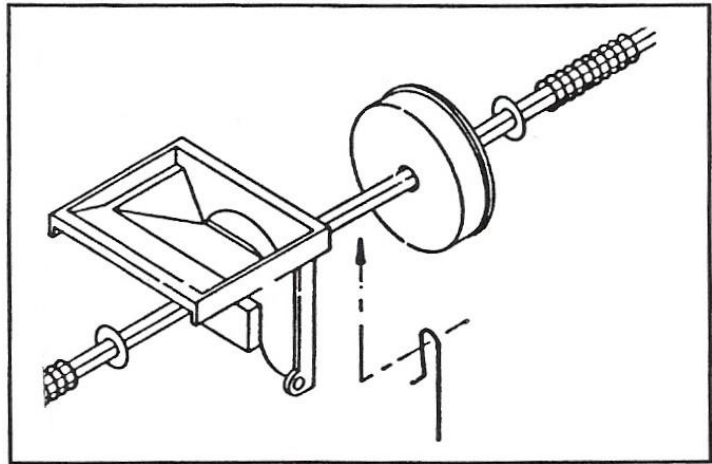
WARNING: When the bean spacers are fitted always go back and recalibrate the drill.

If small seeds need to be sown (i.e. grass seed, brassicas) or small grains (i.e. wheat) always remove the spacers and store in a safe place.

OAT WIPER (Optional)

The oat wiper is an optional extra that is designed to wipe clean the sponge pad if heavily awned seeds are not being sown. These will tend to collect on the pad and as the build-up increases inaccuracies in the seeding rates will occur.

To fit the wiper, remove the front panel from seed box. Pull the sponge pad away from the seeder assembly and place the wiper on the centre shaft BETWEEN the pad and the casting. The wiper works in such a way that it presents a flexible edge on the oats and in effect 'wipes' the seeds that may be sticking to the pads on each rotation.



Fit the Oat Wiper between the sponge pad and the seeder unit.

RODENT DANGER

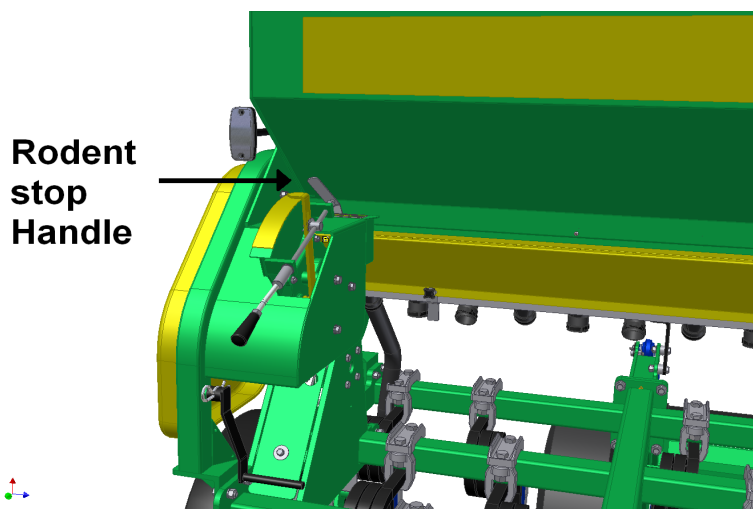
The sponge seed mechanism is unique – it has great capacity to sow seed consistently and accurately. However, if seeds are left in the hopper over the winter months rats and mice will find an entry point into the hopper by chewing through the sponge pad to reach the seeds. The simple solution therefore is to **remove the seeds.**

BLANKOFF TRAY

Your SEEDMATIC drill is equipped with a “Blankoff Tray”. This blankoff tray is located under the seed hopper, between the seeder units and the seed dropper hose. The purpose of this blankoff tray is to help prevent rodent damage to the sponge pads.

Located at the drive end (RH side of drill) is the sprung handle, this handle slides and locks the blankoff tray.

The blankoff tray should be open when planting seeds, then slid closed when the drill is not in use to prevent rodents from climbing up the seed dropper hoses.



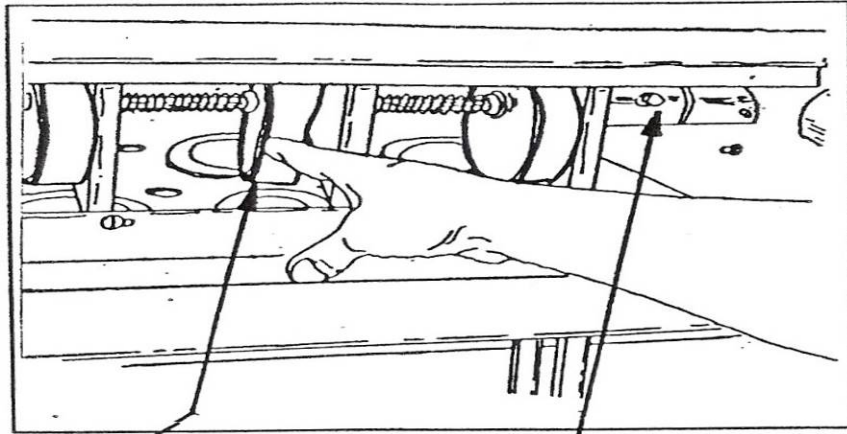
Move Handle towards the centre of drill to close off.

To give added protection, sponge pads can be treated with any strongly odoured insecticide powder – DIASINIT, LINDANE, MALATHION, and THIMET.

Note: Rodent repellent can also be ordered from Aitchison's via your local dealer (Part # 9341).

REMOVAL OF SEED FROM HOPPER

There is probably no easier drill to clean than this Aitchison Drill. Remove the front/rear panel by way of wing nuts and manually move the sponge pads away from the seeder casting. Any remaining seeds within the hopper will simply fall out. A small brush can be used to sweep any remaining seeds from the hopper.



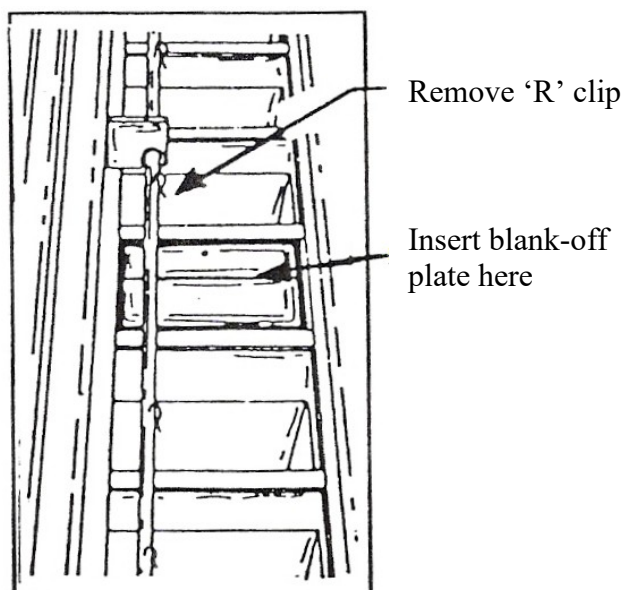
Push pads away to clean out seeds. To remove pads, loosen this setscrew and move shaft to the left.

SPECIAL PURPOSE SEEDING

If the quantity of seed is too small to accurately weigh, then collect the seed from 10 outlets and halve the result before applying the general formulae.

Using Blank Off Plates

If the blank off plates are used – this drill is calculated for rates of 125mm spacing. Blank off plates can be used if wider rows are required. These are fitted by removing the “R” clip agitator pin and fitting a plate (see illustration). These are simple to make using a square of stiff plastic or plywood.



Blank off plates are inserted on each alternative seeder outlet.

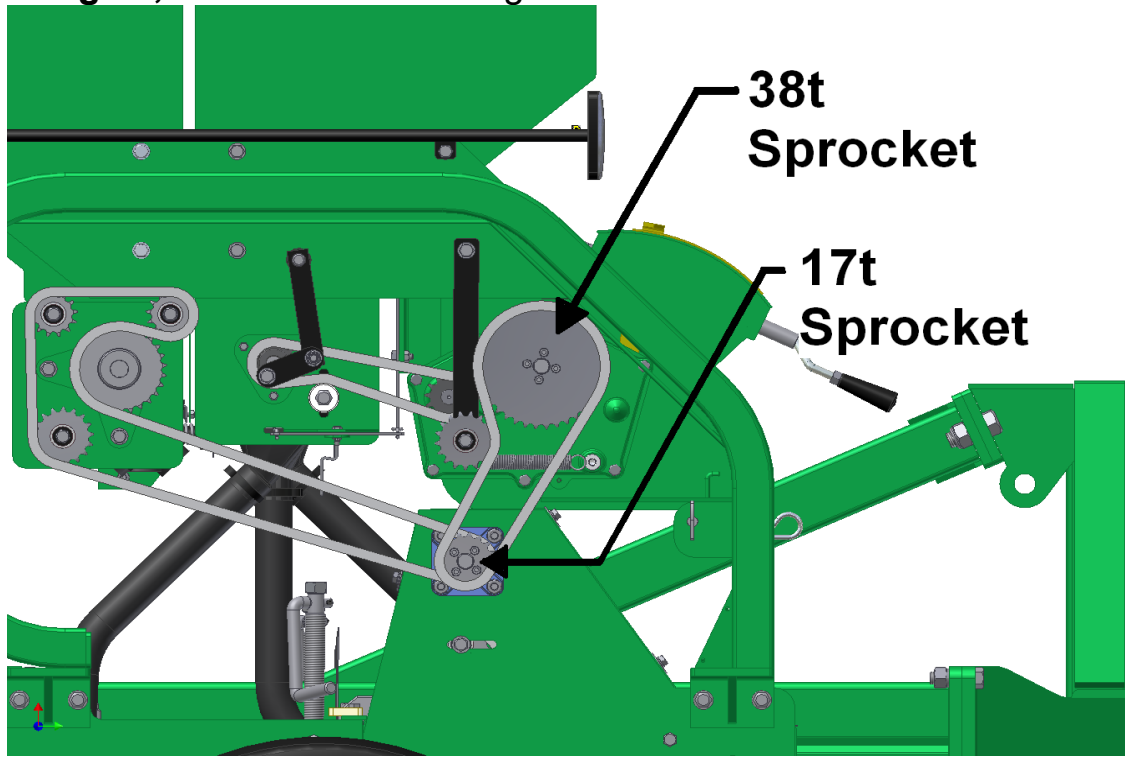
For calculating your seeding rates:

- If every **second row** is blanked off (250mm (10") spacing) catch seed from five outlets and divide by 6 (not 3).
- If every **second and third row** are blanked off (375mm (15") spacing) catch seed from five outlets and divide by 9 (not 3)

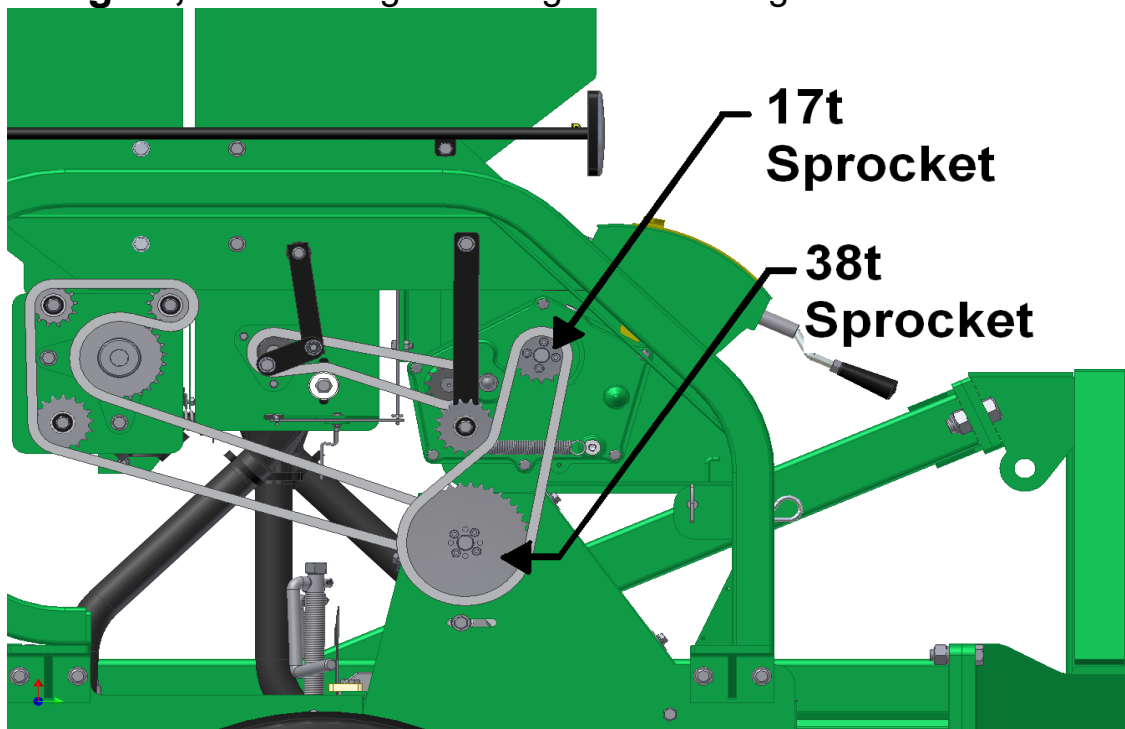
CHANGING THE GEARBOX RATIO: Range 1 – Range 2

To change range: use a 5mm Hex Key to remove the 4 Cap Screws in each sprocket; replace them end for end.

Range 1; Ratio for low seeding rates and small seeds.



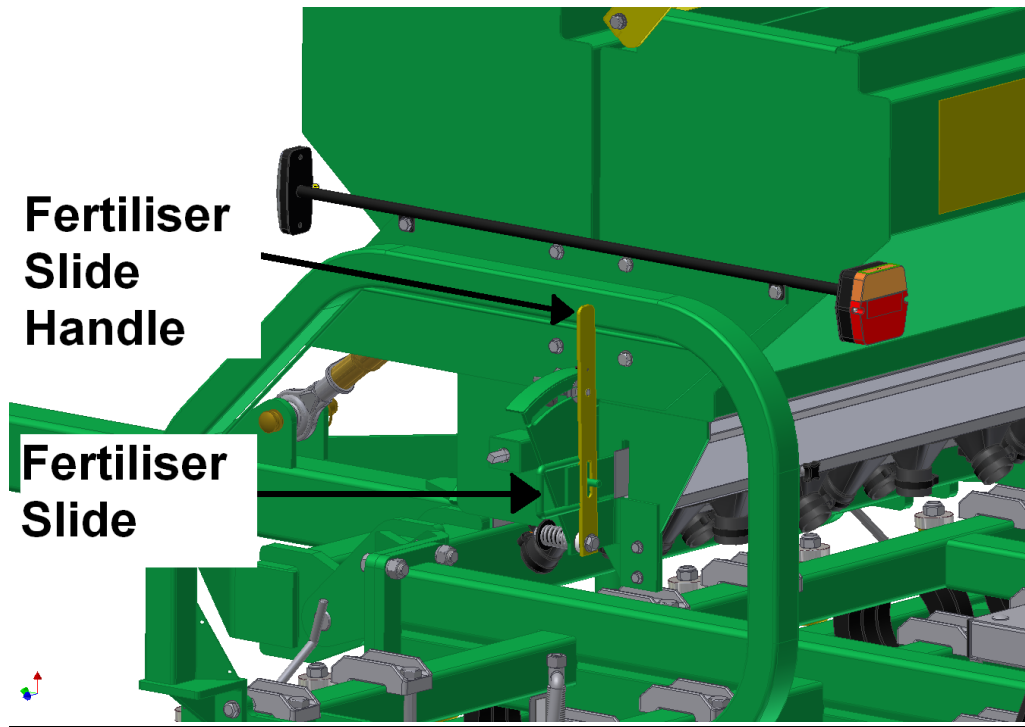
Range 2; Ratio for high seeding rates and big seeds.



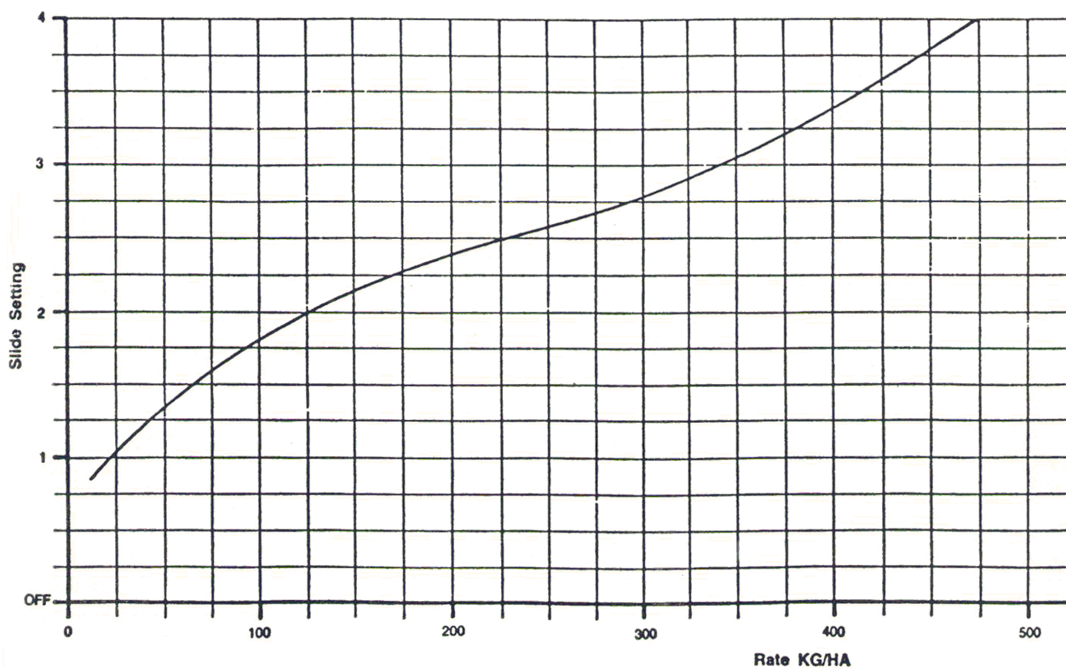
THE FERTILISER SYSTEM

Different types of fertiliser may vary slightly from the general rate of curve shown. The fertiliser rate is verified by using the same calibration procedure as used to calibrate the seed. (Page 20)

To change the fertiliser application rate, move the slide in for less or out for more.



FERTILISER APPLICATION CHART



Note: This chart is a guide only. Calibration is always recommended

N

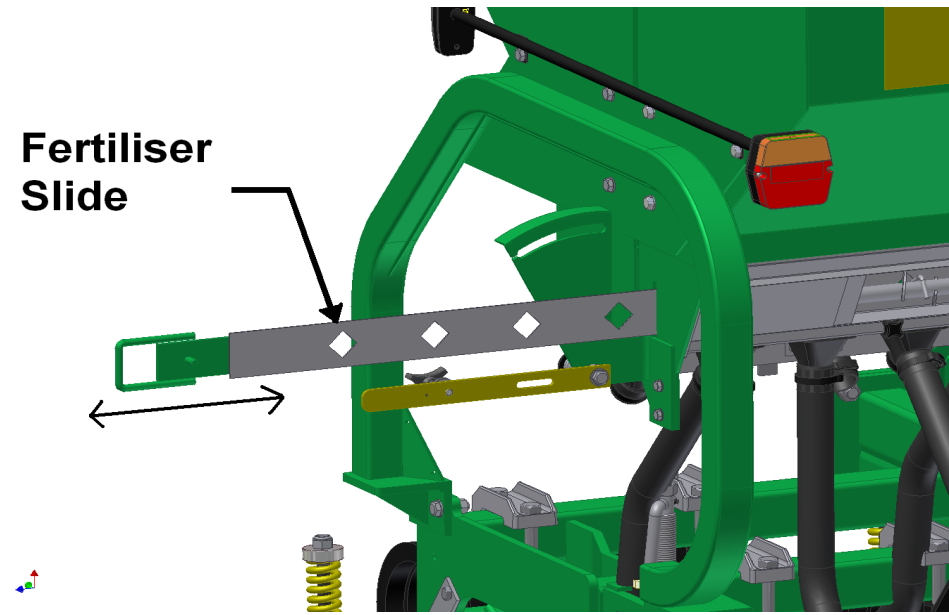
MAINTENANCE AND CLEANING THE FERTILISER HOPPER

The fertiliser hopper should be thoroughly cleaned after use and potential rust areas brushed down with diesel. The fertiliser slide may be easily removed without tools as shown below.

Remove the slide at the end of your planting season to ensure it cannot corrode in place.

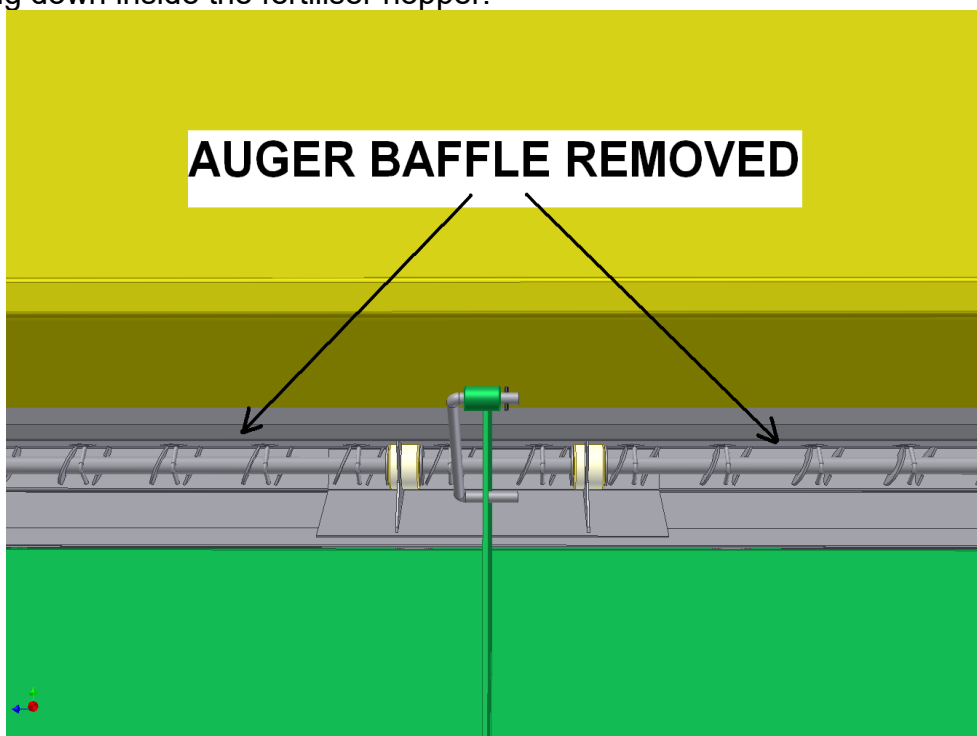
To empty or clean the fertiliser hopper remove the Auger Baffle and the rear Inspection Panels and brush out any remaining fertiliser.

FERTILISER SLIDE REMOVAL

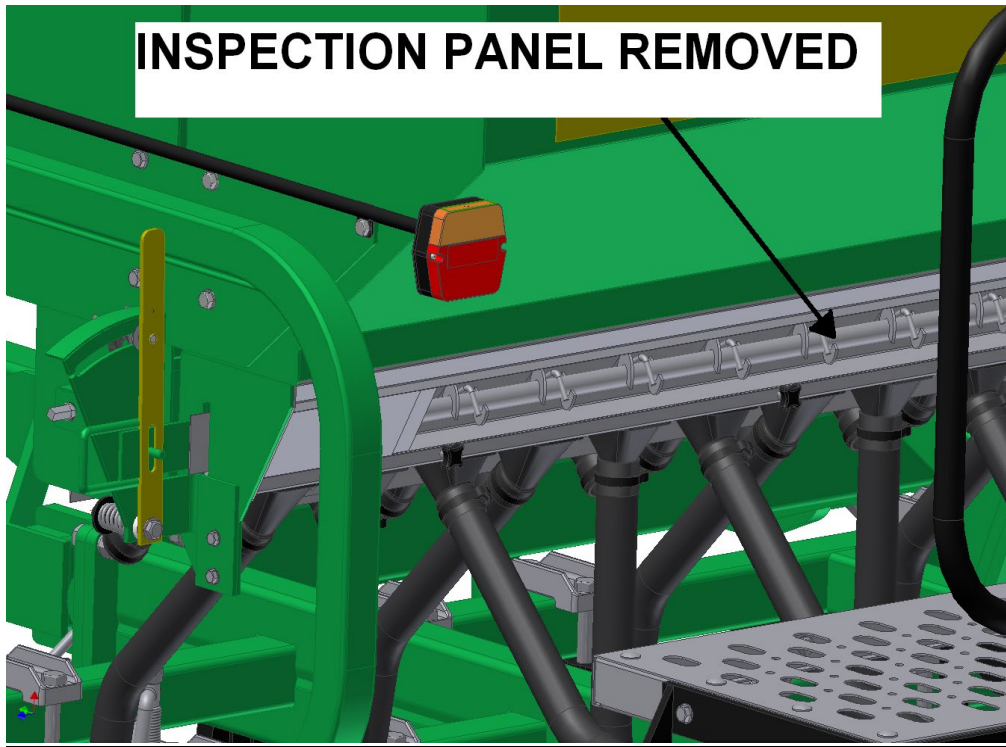


AUGER BAFFLE REMOVED

Looking down inside the fertiliser hopper.



REAR INSPECTION PANELS REMOVED



GENERAL MAINTENANCE

LUBRICATION

The gearbox should be kept filled up to the sight glass though top-ups should seldom be necessary. The oils recommended are: BP Vanellus DD50 (GL1 90.), TOTAL Carter (EP 220) or equivalent.

NOTE: Do not use a hypoid type of oil, as damage will occur.

Machines Grease Points:

- Drive Leg assembly.
- Depth Leg assembly
- Seed Shaft drive.
- Fertiliser Shaft drive.
- Rear Transport assembly.



Greasing location points are labelled on the drill with the “Grease” sticker (shown above). Chains should be kept lubricated and should be removed at least once each season and thoroughly cleaned and oiled.

CARE OF THE SPONGE PADS

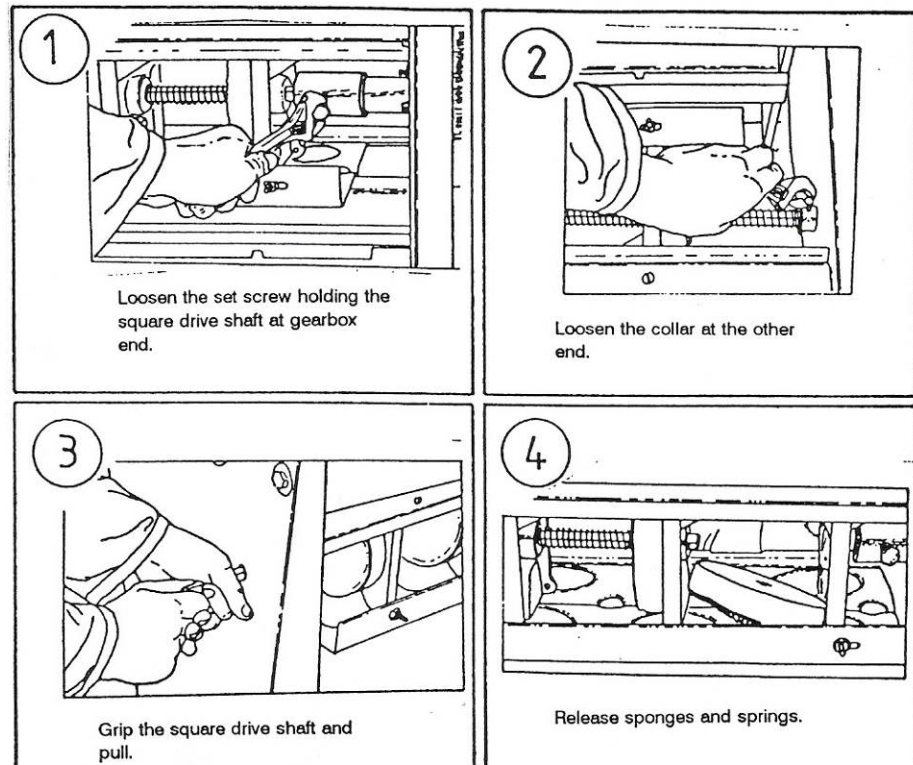
The sponge pads are easily accessible for maintenance and cleaning by removing the inspection panel at the bottom of the seed hopper. The seed hopper should be cleaned thoroughly after use as vermin show little respect for a sponge pad if there is seed behind it.

To empty the hopper of seed, push the pads away from the seeder units to let the seed fall through. Do not leave seed lodged between the pad and seeder unit, as

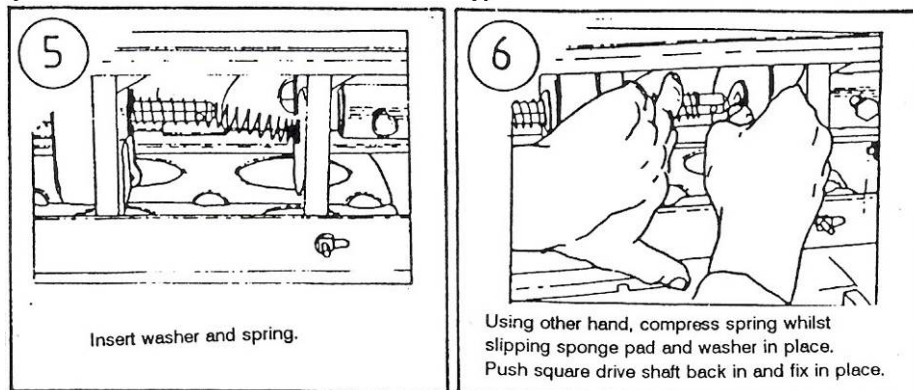
this will distort the pad giving erratic sowing. The sponge pads are replaced as shown below.

REPLACEMENT OF SPONGE PADS

Removing:



Inserting:



SEASONAL STORAGE

The drill should be thoroughly cleaned and lubricated and stored out of the weather. 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. Adjust the depth wheels so the weight of the drill is on the tines and not on the tyres.

AITCHISON “Seedmatic” AREAMETER

Instruction Manual



|

Basic Functions of:

- ✚ Area displayed in Acres or Hectares.
- ✚ Speed displayed in kph or mph
- ✚ Distance Displayed in Kilometres or Meters

Optional Functions of:

- ✚ Working Time
- ✚ 4 section width switch inputs for spray area
- ✚ Low / High Speed Alarm

Introduction

This is a control unit designed by The Reese Group for Aitchison Seedmatic Drills, and can also be used for general use in agriculture.

The rotational speed of the ground wheel is counted by a magnetic reed sensor. This sensor is in line with a magnet fixed to the rotating mechanism. The magnet indicates to the sensor when the wheel has rotated once.

There is a second magnetic sensor or switch input which can be used to disable the area counts at headlands etc. This can be paralleled up to a pause switch if required.

When the control unit is powered down all relevant information is stored and retained.

The functions on the large display can be adjusted by using the two panel buttons.

Technical

| | |
|----------------------|--|
| Power supply | -DC 10 to 30 Volts low current. |
| Fused | -not applicable |
| Dimensions | -150mm x 100mm x 63mm |
| Display | -4 characters, some alphanumeric -Optional backlight. |
| Magnetic Reed Sensor | -M12 nylon, 40mm length, 2 mounting nuts. -Protection fitted to the wheel sensor. |
| Circuit board | -Working distance 10 to 25mm from magnet -Standard Monitor unit ST6265 Processor 8MHz -Memory retention of Count and options |






Installation

Mount the control box within the cab so that the display can be easily seen. Position using a suitable 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. This power source must have permanent power and not be switched through the ignition otherwise data may be lost when switched off. Brown or red core for positive and blue or black for negative. The control is reverse polarity protected.

Run the wheel sensor cable, identified with the protection sleeve, down through the cab to a suitable position on the axle of the wheel. Fashion a bracket to mount the wheel sensor with ½ inch hole or cable tie the sensor in a suitable position. Mount the powerful linear magnet onto the wheel hub with a suitable epoxy glue. Check that the magnet will not catch the sensor and will pass within 25mm of the sensor.

Run the machine cut off sensor cable, identified as the sensor without the protection sleeve, down to a position where the machine will move at headlands. When the magnet is close to this sensor the area counters are disabled, but the speed displays are still enabled. There are many possibilities for positioning this sensor;

-  Lever movements within the cab,
-  Three-point linkage movements at the headlands,
-  Arm movements on the machine.
-  Cut the sensor off and fit to spare terminals on a spray cut-off switch
-  Short circuit to disable the area count.

Check again that the sensor comes within 25mm of the magnet when the unit moves.

Circumference and Span measurements

During the start-up procedure the controller 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.

For the magnet fitted wheel.

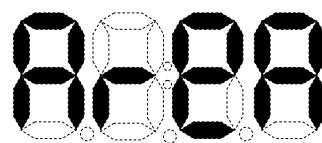
1. Mark the ground and the wheel.
2. Drive in a straight line with a second person counting the number of wheel turns. Stop at ten turns precisely.
3. Measure the distance travelled and divide by ten.
4. Keep a record of this value for future reference.

Span

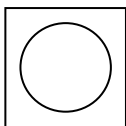
Span is the width of the machine. Note: the maximum width is 25.6m.

Start-Up

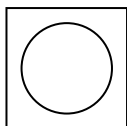
After power on the control displays Area for 2 seconds.
During this time the control performs its own self tests.
During this period, it is also possible for the user to switch
To Options mode.



CHANGE

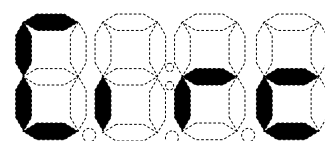


DISPLAY

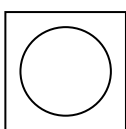


Pressing Change and Display buttons at the same time, whilst the control is in the initial test mode enters the option change mode.

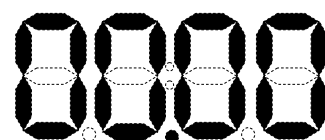
Initially Circ for Circumference is displayed for 2 seconds



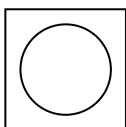
CHANGE



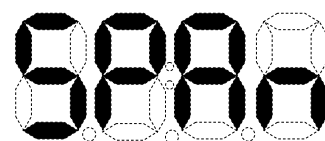
Press change to increase the circumference to the value required. Note the maximum circumference is 5.12 metres, always displayed in meters ie 5m12cm
Press and hold will increment automatically.



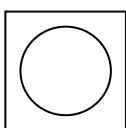
DISPLAY



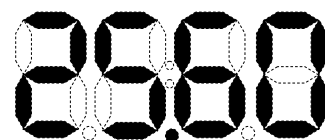
Press display once to store the new circumference and
Move on to input the span of the machine.



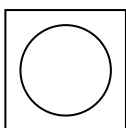
CHANGE



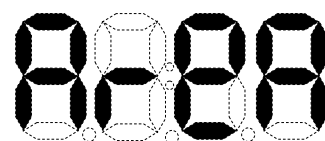
Press change to increase the machine span to the value required. Note the maximum machine width is 25.6 meters, always displayed in meters ie 25m60cm
Press and hold will increment automatically.



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.

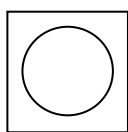
Running Hectare and Acre Display

Displays an accurate running Hectare Area covered.

The smallest denomination displayed is 0.001 Hectares i.e. 10 m².

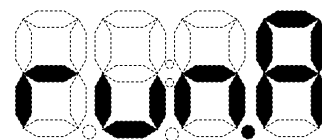
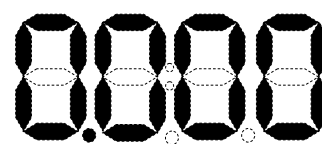
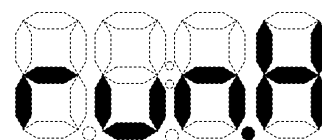
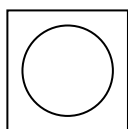
CHANGE

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

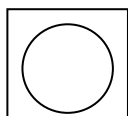
Press Display again to change to the total or machine area displays

This displays an accurate running Hectare Area covered.

The smallest denomination displayed is 0.001 Hectares i.e. 10 m².

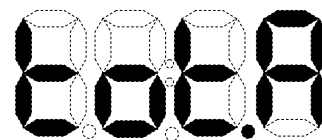
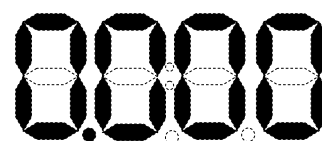
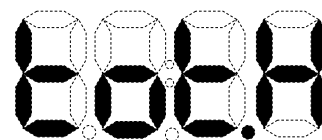
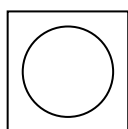
CHANGE

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

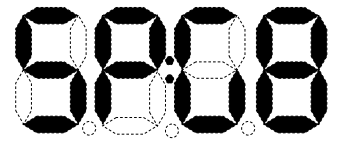
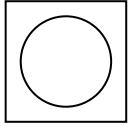
Press Display again to change to the speed display.

This displays an accurate running ground speed.

Initially displays SP:EU for European measurements and displays Ground speed in Km's per hour



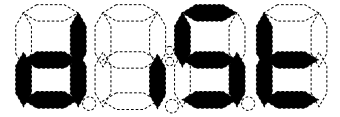
DISPLAY Press display once to convert to show in Miles/hour.
Initial shown by SP:GB



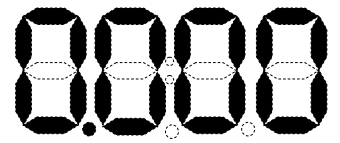
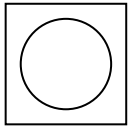
Speed Display is updated every 2 seconds.
If there are no pulses for 10 seconds, then the display will clear.

Display Distance in Kilometres and Meters.

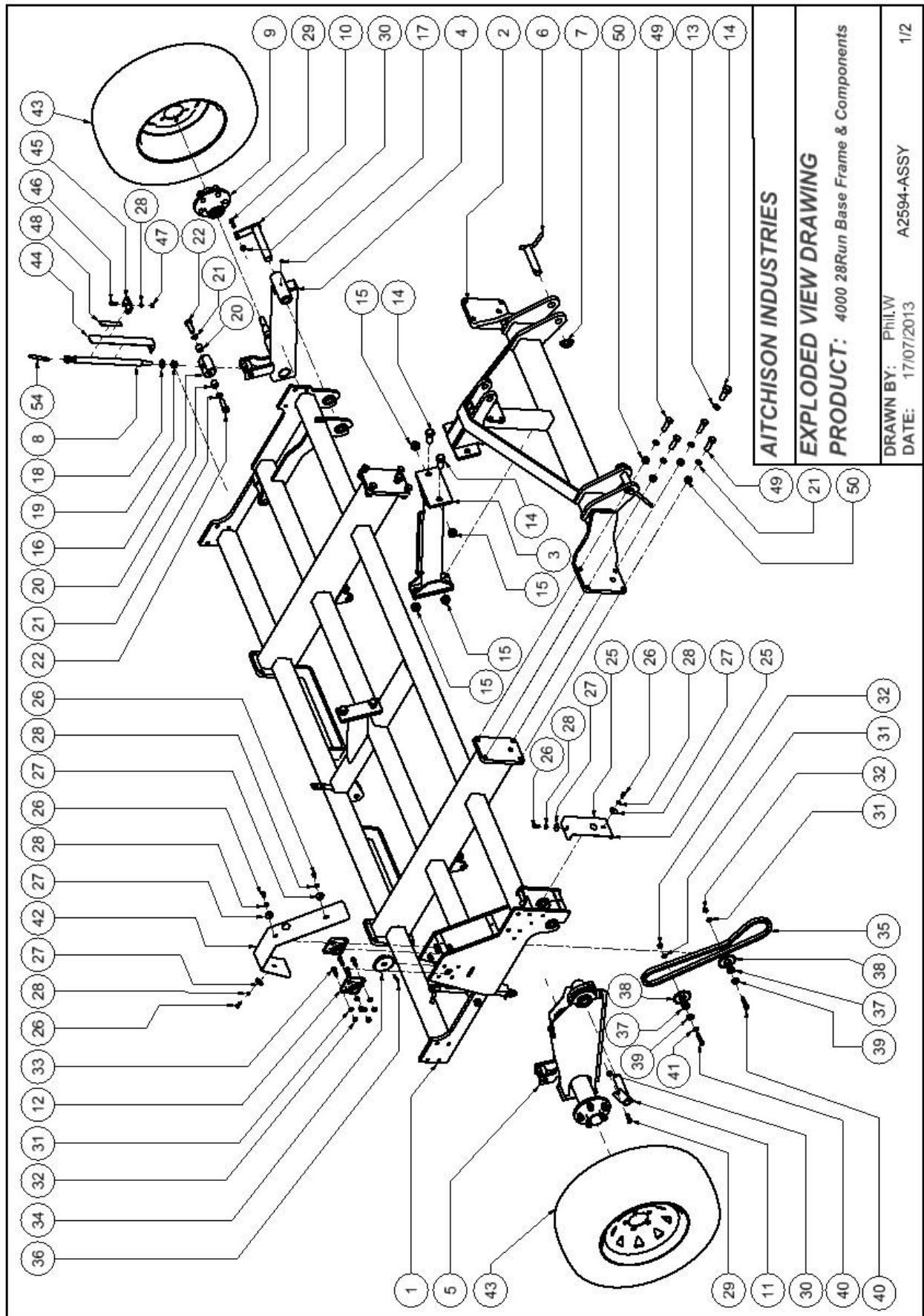
Press Display again to change to show Distance
This displays an accurate running Distance covered.
The smallest denomination displayed is 0.001 Kms or 1 m.



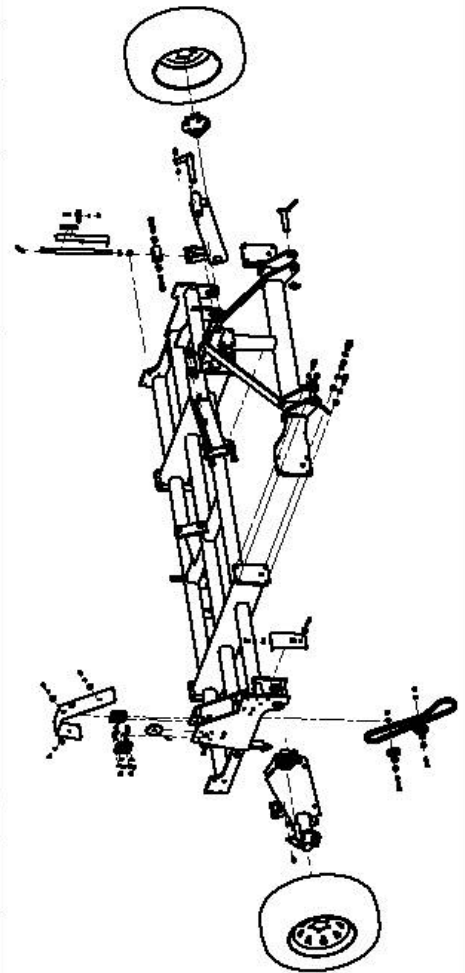
DISPLAY Press and hold change to clear the Distance store.



Press display again to revert to running area.



| Parts List | | | | Parts List | | | |
|------------|-----|-------------------------------|--------------|------------|-----|-----------------------------------|-------------|
| ITEM | QTY | DESCRIPTION | PART NUMBER | ITEM | QTY | DESCRIPTION | PART NUMBER |
| 1 | 1 | 3.5m Frame Assembly | A2595 | 29 | 2 | M10 x 30 Bolt | 8415H |
| 2 | 1 | 4000 Head Stock Assembly | A2502 | 30 | 2 | M10 Nyloc Nut | 9142 |
| 3 | 1 | Headstock Stay Assembly | A2503 | 31 | 10 | 10mm Spring Washer | 9041 |
| 4 | 1 | Depth Leg Assembly | A2504 | 32 | 10 | M10 Nut | 9141 |
| 5 | 1 | Drive Leg Setup | A2580-ASSY | 33 | 8 | M10 x 35 Bolt | 8402H |
| 6 | 2 | AIL Cat 2 Hitch Pin | A2327 | 34 | 1 | 22T Sprocket 1/2" Pitch 20mm Bore | A2500-09 |
| 7 | 2 | 11mm Lynch Pin | 9288 | 35 | 1 | 4000 Series DL to LS Chain | A2500-08 |
| 8 | 2 | Depth Control Rod Assembly | A2506 | 36 | 1 | 6 x 50 Roll Pin | 9262 |
| 9 | 1 | Trojan 5 Stud Hub | TR 082030 | 37 | 2 | 6200 Bearing | 9219 |
| 10 | 1 | 4000 Depth Leg Pivot Pin | A2507 | 38 | 2 | 17T Plate Sprocket Tensioner | A2350-01 |
| 11 | 1 | 4000 Drive Leg Pivot Pin | A2508 | 39 | 2 | DL to LS Chain Tensioner Spacer | A2500-04 |
| 12 | 2 | F204 Bearing & Housing | 9221 / 92205 | 40 | 2 | M10 x 50 Bolt | 8403H |
| 13 | 2 | 20mm Spring Washer | 9076 | 41 | 1 | 10mm HD Flat Washer | 9040 |
| 14 | 4 | M20 x 50 Bolt | 8711H | 42 | 1 | 4000 Lay Shaft Cover | A2500-05 |
| 15 | 4 | M20 Nyloc Nut | 9122 | 43 | 2 | 215-75R 14C Wheel Assembly | A2500-10 |
| 16 | 2 | Threaded Top Trunion | A2309-01 | 44 | 2 | Depth Leg Depth Gauge | A2500-06 |
| 17 | 3 | M6 Grease Nipple Straight | 9323 | 45 | 2 | Depth Gauge Retainer | A2500-07 |
| 18 | 2 | 16mm ZP Washer | 9063 | 46 | 2 | M8 x 25 Bolt | 8305H |
| 19 | 2 | M16 Nyloc Nut | 16A | 47 | 2 | M8 Nut | 9106 |
| 20 | 4 | 4000 Depth Leg Trunion Keeper | A2500-01 | 48 | 2 | Decal - GF Depth Control | D1525 |
| 21 | 12 | 16mm Spring Washer | 9061 | 49 | 8 | M16 x 55 Bolt | 8603H |
| 22 | 4 | M16 x 50 Bolt | 8616H | 50 | 8 | M16 Nut | 9161 |
| 25 | 1 | 4000 Leg Pivot Cover | A2500-03 | 51 | 2 | M20 x 55 Bolt | 8718H |
| 26 | 5 | M8 x 20 Bolt | 8311H | 52 | 1 | 1/2" Chain Half Link | ZCH1/2L |
| 27 | 5 | 8mm Fender Washer | 9032 | 53 | 1 | 1/2" Chain Joiner Link | ZCH1/2J |
| 28 | 7 | 8mm Spring Washer | 9030 | 54 | 2 | 4000 Depth Control Handle | A2600-01 |

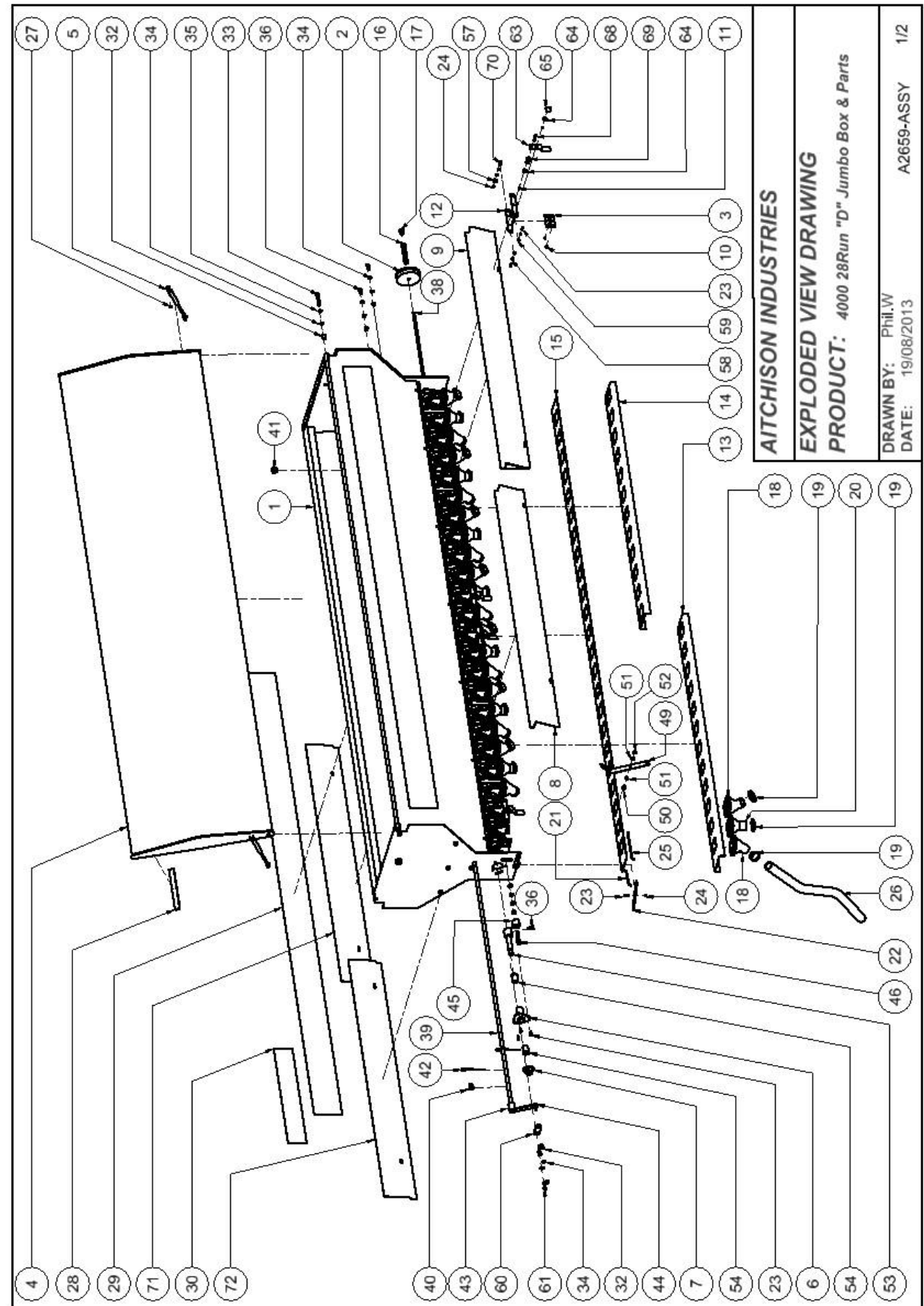


AITCHISON INDUSTRIES

EXPLODED VIEW DRAWING

PRODUCT: 4000 28Run Base Frame & Components
Parts

DRAWN BY: Phil.W
DATE: 17/07/2013
A2594-ASSY 2/2



| ITEM | QTY | DESCRIPTION | PART NUMBER | ITEM | QTY | DESCRIPTION | PART NUMBER |
|------|-----|--|--------------|------|-----|---|-------------|
| 1 | 1 | 28Run Jumbo Box Assembly (4000) | A2667 | 37 | 8 | M10 Nut | 9141 |
| 2 | 28 | Sponge Pad & Disc | A2364 | 38 | 1 | 4000 28Run Seed Shaft | A2573-07 |
| 3 | 4 | 3" x 2" S/S Butt Hinge | A23805 | 39 | 1 | 4000 28Run Agitator Shaft | A2573-06 |
| 4 | 1 | 4000 Series Jumbo Lid Assembly (28Run) | A2668 | 40 | 6 | S 210M Flanged Bush | A2357 |
| 5 | 2 | Ezy Lift Gas Stay | A3041-02 | 41 | 1 | 16mm Locking Collar | A2360 |
| 6 | 1 | Seed Shaft Mount | A2337 | 42 | 28 | Agitator Shaft R Clip | A2359 |
| 7 | 1 | 13T Sprocket 1/2" Agitator Boss | A28025 | 43 | 1 | Agitator Boss | A28034-02 |
| 8 | 1 | 28Run Front D-S Calibration Panel Assembly | A2575 | 44 | 1 | 4000 Adaptor Shaft Arm | A2540-12 |
| 9 | 1 | 28Run Front Non-D-S Calibration Panel Assembly | A2576 | 45 | 1 | Nylon Tensioner Roller | A2336-04 |
| 10 | 8 | 6-8 S/S Rivet | 9302 | 46 | 1 | M12 x 65 Bolt | 8507H |
| 11 | 2 | M6 S/S Nyloc Nut | 9109S | 47 | 2 | M12 Nut | 9152 |
| 12 | 4 | 4000 Series Blank Off Plate Retainer | A2540-01 | 48 | 2 | 12mm Flat Washer | 9051 |
| 13 | 1 | 4000 Series D-End Seed Tray (28Run) | A2573-01 | 49 | 1 | 4000 End Panel Rodent Handle | A2540-11 |
| 14 | 1 | 4000 Series Non-D-End Seed Tray (28Run) | A2573-02 | 50 | 1 | M8 x 20 Bolt | 8311H |
| 15 | 1 | 4000 Series Rodent Stop Slide (28Run) | A2573-03 | 51 | 2 | 8mm Flat Washer | 9031 |
| 16 | 28 | Spring - Moore Sponge Pad | A2280-10 | 52 | 1 | M8 Nyloc Nut | 9105 |
| 17 | 28 | S 9 Plastic Bush | A2280-11 | 53 | 1 | Seed Shaft Axle | A2361 |
| 18 | 14 | Fert Cup Angled | A2290-13 | 54 | 2 | S 15 Flanged Bush | A2352 |
| 19 | 28 | 35mm Crey Clip | A2370 | 56 | 1 | M6 Stright Grease Nipple | 9323 |
| 20 | 14 | Fert Cup Straight | A2290-12 | 57 | 7 | 6mm Fender Washer | 9022 |
| 21 | 1 | 4000 Series Rodent Stop Link Wire | A2540-05 | 58 | 19 | 6mm Spring Washer | 9021 |
| 22 | 1 | 4000 Series Rodent Stop Link Arm | A2540-06 | 59 | 19 | M6 Nut | 9121 |
| 23 | 16 | M6x20 Bolt | 8205H | 60 | 1 | Agitator Arm Link | A28008 |
| 24 | 5 | M6 Nyloc Nut | 9109 | 61 | 2 | Agitator Link Bolt | A2618-04 |
| 25 | 1 | 4000 Series Rodent Stop Lever Wire | A2540-07 | 62 | 1 | M10 Nyloc Nut | 9142 |
| 26 | 1 | 35mm Seed Dropper Hose / Meter | A2384-01 | 63 | 4 | Seed Tray Clip | A3040-07 |
| 27 | 2 | M8 Half Nut | 9103 | 64 | 8 | 6mm S/S Fender Washer | 9022S |
| 28 | 3 | Buffer Pad | A2375 | 65 | 4 | M6 Cross Knob | 9122 |
| 29 | 2 | 3M Yellow Panel Decal | D1513 | 66 | 4 | M6 S/S Nut | 9121S |
| 30 | 1 | Decal "SEEDMATIC" | D1510 | 67 | 4 | M6 x 20 S/S Bolt | 8205S |
| 31 | 1 | Decal "4028DT" & "4028CT" | D4013, D4020 | 68 | 4 | M6 x 50 SS Bolt | 8210S |
| 32 | 4 | S 206M Flanged Bush | A2355 | 69 | 4 | Agrisprod Spinner Disc Spring | A4619 |
| 33 | 2 | M10 x 65 Bolt | 8417H | 70 | 4 | M6 x 25 Bolt | 8213H |
| 34 | 12 | 10 mm Flat Washer | 9042 | 71 | 1 | 28Run Jumbo Rear Non D-S Inspection Panel | A2666-01 |
| 35 | 10 | 10mm Spring Washer | 9041 | 72 | 1 | 28Run Jumbo Rear D-S Inspection Panel | A2666-02 |
| 36 | 9 | M10 x 25 Bolt | 8418H | 73 | 1 | 6 x 40 Roll Pin | 9251 |



AITCHISON INDUSTRIES

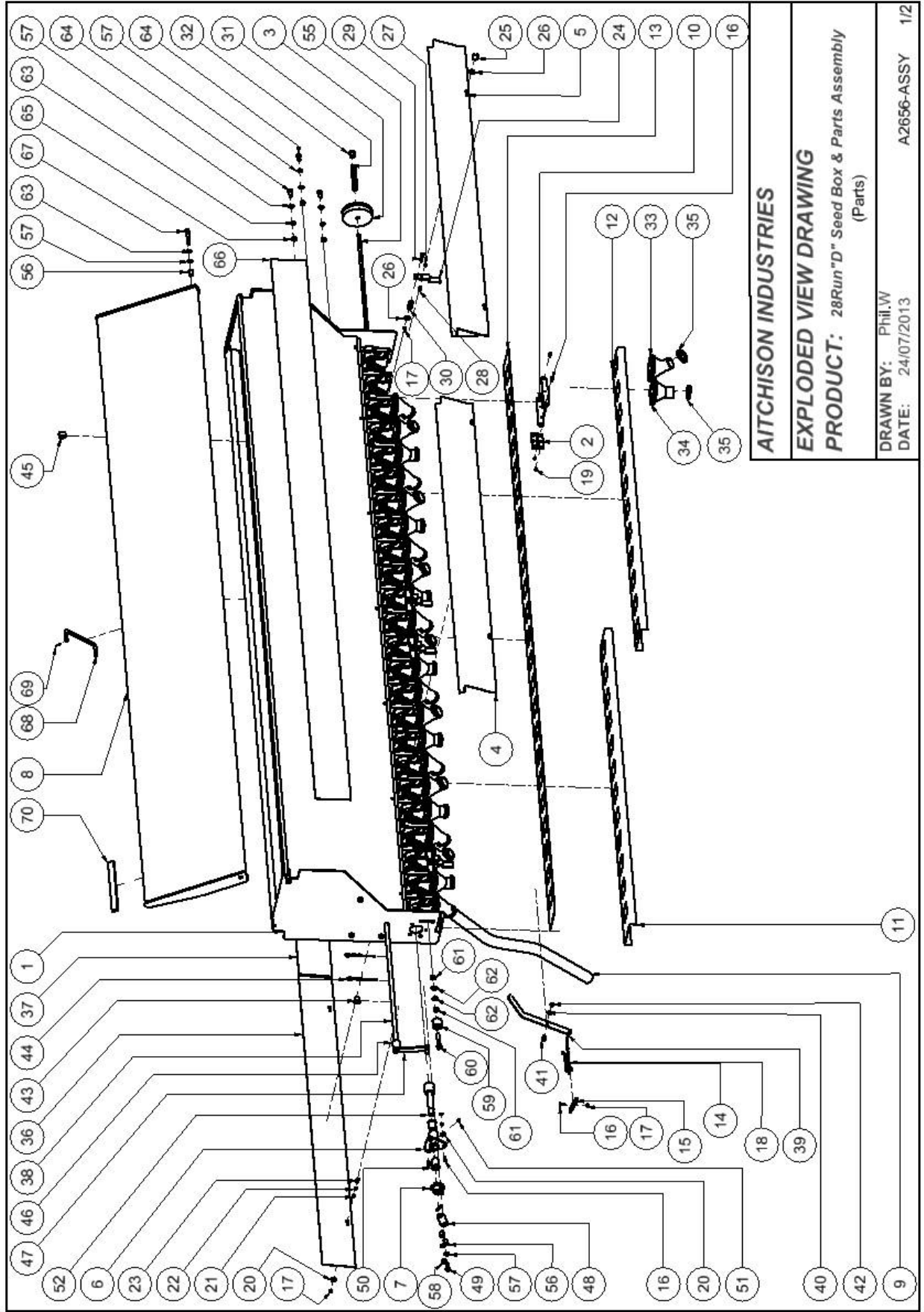
EXPLODED VIEW DRAWING

PRODUCT: 4000 28Run "D" Jumbo Box Part Numbers

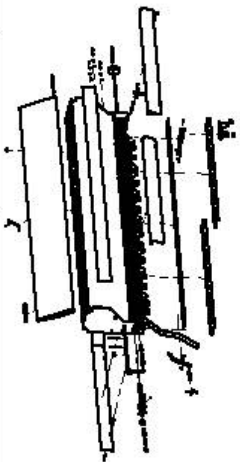
DRAWN BY: Phil.W
DATE: 19/08/2013

A2659-ASSY

2/2



| ITEM | QTY | DESCRIPTION | PART NUMBER | ITEM | QTY | DESCRIPTION | PART NUMBER |
|------|-----|--|-------------|------|-----|--|-------------|
| 1 | 1 | 28Run Seed Box Assembly | A2574 | 36 | 1 | 28Run Seed D-S Rear Inspection Panel | A2573-04 |
| 2 | 4 | 3" x 2" S/S Butt Hinge | A23805 | 37 | 1 | 28Run Seed Non-D-S Rear Inspection Panel | A2573-05 |
| 3 | 28 | Sponge Pad & Disc | A2364 | 38 | 1 | 4000 28Run Agitator Shaft | A2573-06 |
| 4 | 1 | 28Run Front D-S Calibration Panel Assembly | A2575 | 39 | 1 | 4000 End Panel Rodent Handle | A2540-11 |
| 5 | 1 | 28Run Front Non-D-S Calibration Panel Assembly | A2576 | 40 | 1 | 8mm Flat Washer | 9031 |
| 6 | 1 | Seed Shaft Mount | A2337 | 41 | 1 | M8 x 20 Bolt | 8311H |
| 7 | 1 | 13T Sprocket 1/2" Agitator Boss | A28025 | 42 | 1 | M8 Nyloc Nut | 9105 |
| 8 | 1 | 4000 Series Seed Lid Assembly (28Run) | A2577 | 43 | 6 | S 210M Flanged Bush | A2357 |
| 9 | 1 | 35mm Seed Dropper Hose / Meter | A2384-01 | 44 | 28 | Agitator Shaft R Clip | A2359 |
| 10 | 4 | 4000 Series Blank Off Plate Retainer | A2540-01 | 45 | 1 | 16mm Locking Collar | A2360 |
| 11 | 1 | 4000 Series D-End Seed Tray (28Run) | A2573-01 | 46 | 1 | Agitator Boss | A28034-02 |
| 12 | 1 | 4000 Series Non-D-End Seed Tray (28Run) | A2573-02 | 47 | 1 | 4000 Adiator Shaft Arm | A2540-12 |
| 13 | 1 | 4000 Series Rodent Stop Slide (28Run) | A2573-03 | 48 | 1 | Agitator Arm Link | A28008 |
| 14 | 1 | 4000 Series Rodent Stop Link Wire | A2540-05 | 49 | 2 | Agitator Link Bolt | A2618-04 |
| 15 | 1 | 4000 Series Rodent Stop Link Arm | A2540-06 | 50 | 2 | S 15 Flanged Bush | A2352 |
| 16 | 16 | M6x20 Bolt | 8205H | 51 | 1 | M6 Grease Nipple Straight | 9323 |
| 17 | 9 | M6 Nyloc Nut | 9109 | 52 | 1 | Seed Shaft Axle | A2361 |
| 18 | 1 | 4000 Series Rodent Stop Lever Wire | A2540-07 | 55 | 1 | 4000 28Run Seed Shaft | A2573-07 |
| 19 | 16 | 6-8 S/S Rivet | 9302 | 56 | 4 | S 206M Flanged Bush | A2355 |
| 20 | 7 | 6mm Fender Washer | 9022 | 57 | 10 | 10 mm Flat Washer | 9042 |
| 21 | 19 | M6 Nut | 9121 | 58 | 1 | M10 Nyloc Nut | 9142 |
| 22 | 19 | 6mm Spring Washer | 9021 | 59 | 1 | Nylon Tensioner Roller | A2336-04 |
| 23 | 4 | M6 x 25 Bolt | 8213H | 60 | 1 | M12 x 65 Bolt | 8507H |
| 24 | 4 | Seed Tray Clip | A3040-07 | 61 | 2 | M12 Nut | 9152 |
| 25 | 4 | M6 Cross Knob | 9122 | 62 | 2 | 12mm Flat Washer | 9051 |
| 26 | 8 | 6mm S/S Fender Washer | 9022S | 63 | 8 | 10mm Spring Washer | 9041 |
| 27 | 4 | M6 S/S Nut | 9121S | 64 | 6 | M10 x 25 Bolt | 8418H |
| 28 | 4 | M6 x 20 S/S Bolt | 8205S | 65 | 6 | M10 Nut | 9141 |
| 29 | 4 | M6 x 50 SS Bolt | 8210S | 66 | 1 | 3M Yellow Panel Decal | D1513 |
| 30 | 4 | Agrisped Spinner Disc Spring | A4619 | 67 | 2 | M10 x 65 Bolt | 8417H |
| 31 | 28 | Seed Pad Spring | A2280-10 | 68 | 1 | 4000 Series Lid Stay | A2540-15 |
| 32 | 28 | S 9 Plastic Bush | A2280-11 | 69 | 1 | 3 x 20 Roll Pin | 9267 |
| 33 | 14 | Fert Cup Angled | A2290-13 | 70 | 4 | Buffer Pad | A2375 |
| 34 | 14 | Fert Cup Straight | A2290-12 | 71 | 1 | 6 x 40 Roll Pin | 9251 |
| 35 | 28 | 35mm Cray Clip | A2370 | 72 | 1 | M10 x 20 Bolt | 8419H |



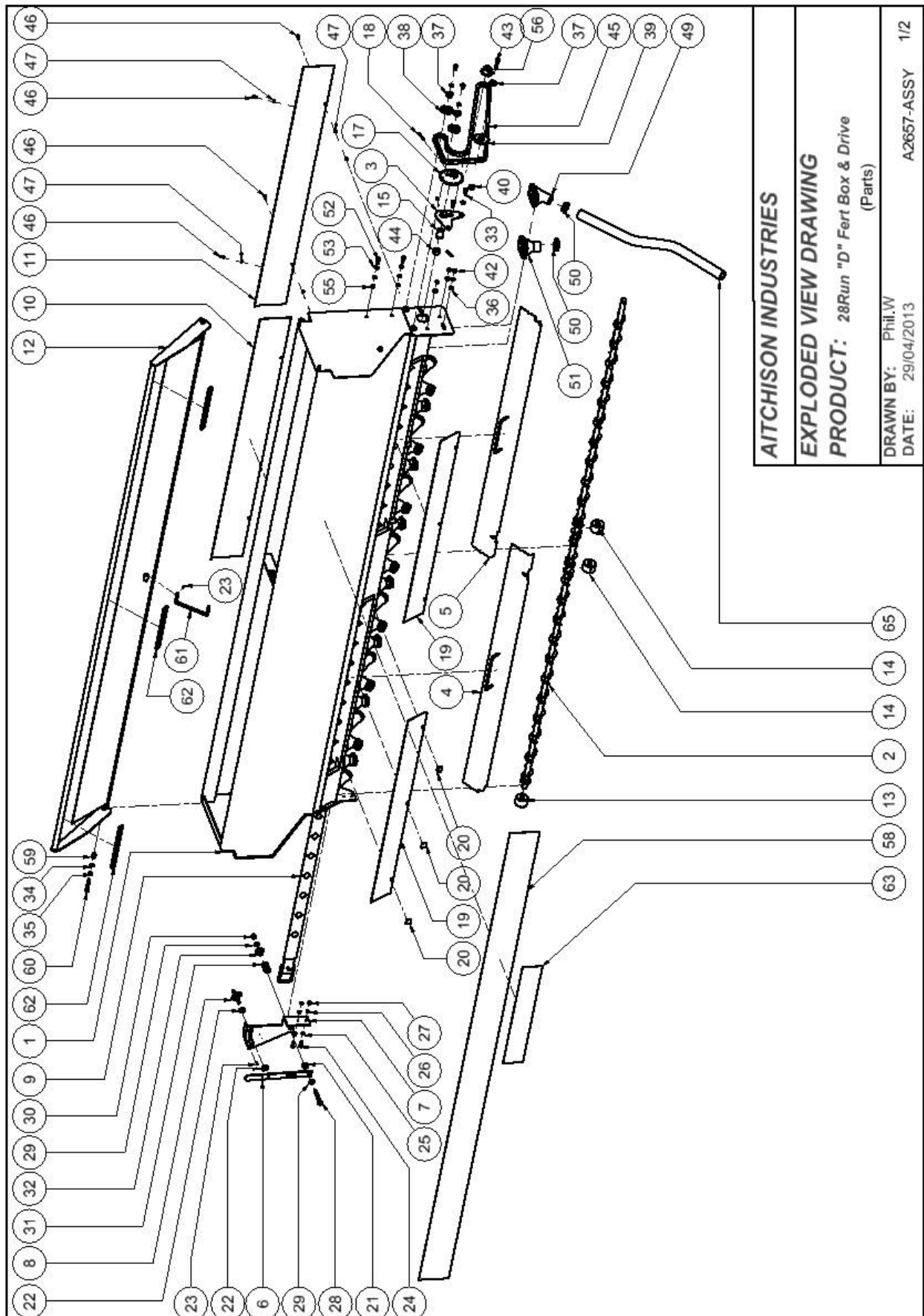
AITCHISON INDUSTRIES

EXPLODED VIEW DRAWING

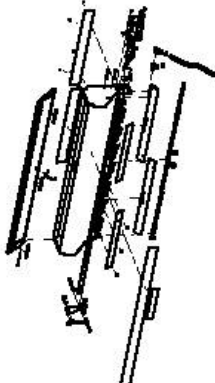
PRODUCT: 28Run "D" Seed Box & Parts Assembly
(Numbers)

DRAWN BY: Phil.W
DATE: 24/07/2013

A2656-ASSY 2/2



| Parts List | | | | Parts List | | | |
|------------|-----|---|-------------|------------|-----|-----------------------------------|-------------|
| ITEM | QTY | DESCRIPTION | PART NUMBER | ITEM | QTY | DESCRIPTION | PART NUMBER |
| 1 | 1 | 4000 28Run Complete Fert Box Assembly | A2584 | 35 | 7 | 10mm Spring Washer | 9041 |
| 2 | 1 | 4000 28Run Fert Auger Assembly | A2587 | 36 | 3 | M10 Nut | 9141 |
| 3 | 1 | 4000 Fert Auger Drive Mount Assembly | A2555 | 37 | 3 | 6200 Bearing | 9219 |
| 4 | 1 | 4000 28Run LH Fert Baffle Assembly | A2588LH | 38 | 2 | 13T 1/2" Pitch Idler Sprocket | A2550-05 |
| 5 | 1 | 4000 28Run RH Fert Baffle Assembly | A2588RH | 39 | 1 | 17T Plate Sprocket Tensioner | A2350-01 |
| 6 | 1 | Fertiliser Control Arm | A23142 | 40 | 1 | 4000 Fert Auger Tensioner Boss | A2550-02 |
| 7 | 1 | Fertiliser Control | A23143 | 42 | 1 | 10mm HD Flat Washer | 9040 |
| 8 | 1 | M10 Fert Adjuster Handle | A23145 | 43 | 1 | M10 x 45 Bolt | 8404H |
| 9 | 1 | 4000 28Run Fert Slide Assembly | A2589 | 44 | 1 | 7/8" Shaft Collar (22mm) | A23148 |
| 10 | 1 | 4000 28Run LH Fert Slide Cover Assembly | A2569LH | 45 | 1 | 4000 Fert Box Drive Chain | A2550-04 |
| 11 | 1 | 4000 28Run RH Fert Slide Cover Assembly | A2569RH | 46 | 8 | M6 x 16 Bolt | 8208H |
| 12 | 1 | 4000 Series Seed Lid Assembly (28Run) | A2577 | 47 | 8 | 6mm Spring Washer | 9021 |
| 13 | 1 | 4000 Series End Auger Bush | A2556 | 48 | 4 | M6 Nut | 9121 |
| 14 | 2 | 4000 Series Central Auger Bush | A2557 | 49 | 14 | Round Cup Angled | A2369 |
| 15 | 1 | S 15 Flanged Bush | A2352 | 50 | 28 | 35mm Cray Clip | A2370 |
| 16 | 1 | M6 Grease Nipple Straight | 9323 | 51 | 14 | Round Cup Straight | A2368 |
| 17 | 1 | 27T Sprocket Half Inch Pitch 7/8" Bore | A23130 | 52 | 6 | M10 x 25 S/S Bolt | 8418S |
| 18 | 1 | 6 x 50 Roll Pin | 9262 | 53 | 6 | 10mm S/S Flat Washer | 9039S |
| 19 | 2 | 4000 28Run Trough Removable Panel | A2583-01 | 54 | 6 | 10mm S/S Spring Washer | 9041S |
| 20 | 6 | M6 Cross Knob | 9122 | 55 | 6 | M10 S/S Nut | 9141S |
| 21 | 1 | 10mm Spacer | A23142-01 | 56 | 1 | 13T Sprocket 1/2" Pitch Boss 20ID | A2339-01 |
| 22 | 2 | M10 Fender Washer | 9037 | 58 | 1 | 3M Yellow Panel Decal | D1513 |
| 23 | 2 | 3 x 20 Roll Pin | 9267 | 59 | 2 | S 206M Flanged Bush | A2355 |
| 24 | 2 | M8 x 25 Bolt | 8305H | 60 | 2 | M10 x 65 Bolt | 8417H |
| 25 | 2 | 8mm Flat Washer | 9031 | 61 | 1 | 4000 Series Lid Stay | A2540-15 |
| 26 | 2 | 8mm Spring Washer | 9030 | 62 | 4 | Buffer Pad | A2375 |
| 27 | 2 | M8 Nut | 9106 | 63 | 1 | Decal "SEEDMATIC" | D1510 |
| 28 | 1 | M12 x 90 Bolt | 8524H | 64 | 1 | Decal "4128DT" | D4009 |
| 29 | 2 | 12mm Flat Washer | 9051 | 65 | 1 | 35mm Seed Dropper Hose / Meter | A2384-01 |
| 30 | 1 | M12 Nyloc Nut | 9151 | 66 | 1 | 1/2" Chain Joiner | ZCH1/2J |
| 31 | 1 | Fert Leaver Spring | A23146 | 67 | 1 | 1/2" Chain Half Link | ZCH1/2L |
| 32 | 1 | S 179M Plastic Bush | A23142-02 | 68 | 1 | 6 x 40 Roll Pin | 9251 |
| 33 | 2 | M10 x 25 Bolt | 8418H | 69 | 2 | M10 x 20 Bolt | 8419H |
| 34 | 4 | 10 mm Flat Washer | 9042 | | | | |



| | |
|---|----------------|
| AITCHISON INDUSTRIES | |
| EXPLODED VIEW DRAWING | |
| PRODUCT: 28Run "D" Fert Box & Drive (Numbers) | |
| DRAWN BY: Phil.W | A2657-ASSY 2/2 |
| DATE: 29/04/2013 | |

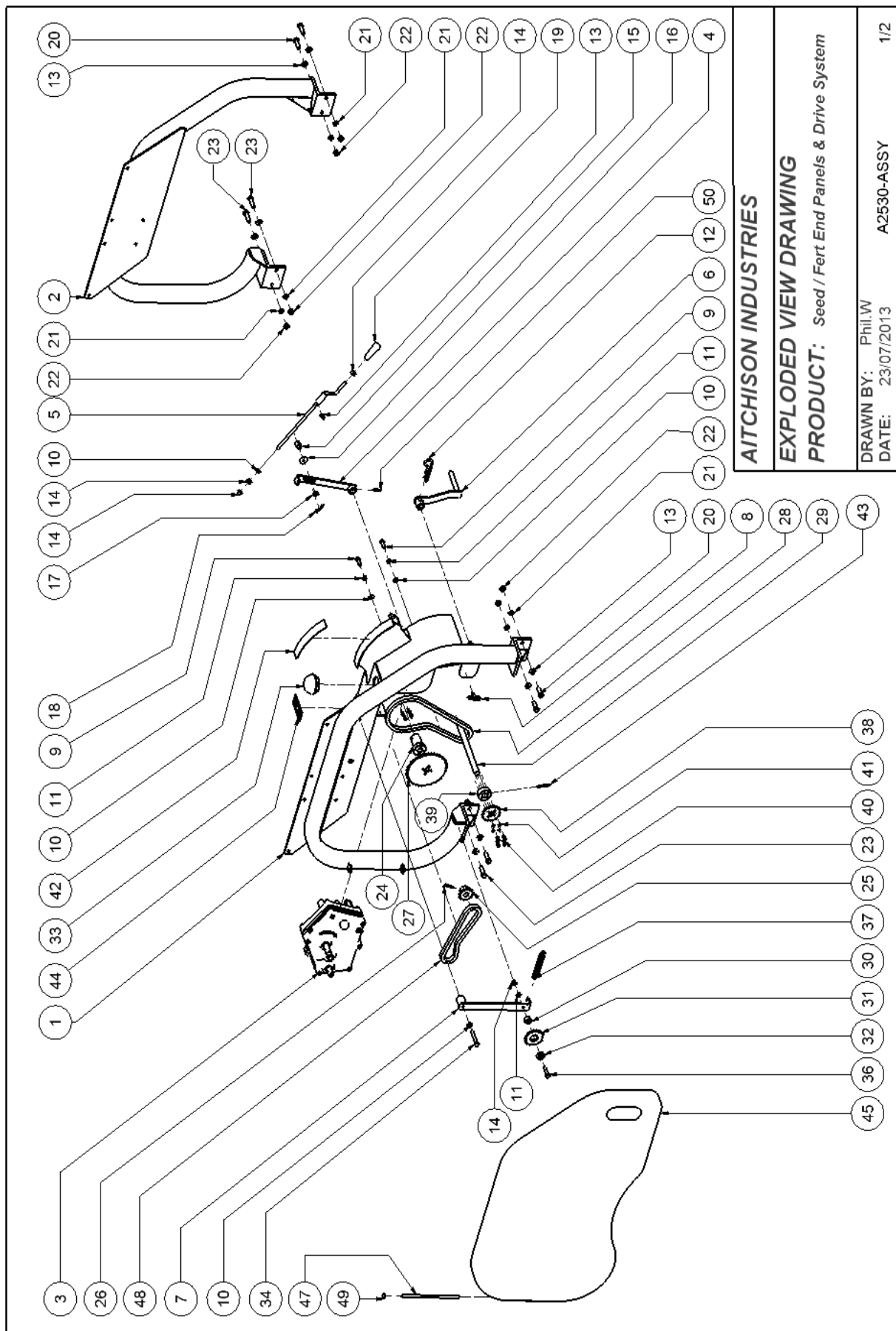
| Parts List | | | |
|------------|-----|---|-------------|
| ITEM | QTY | DESCRIPTION | PART NUMBER |
| 1 | 1 | Drive Leg Assembly | A2505 |
| 2 | 1 | 27T Idler Sprocket | A2580-07 |
| 3 | 1 | Drive Hub Spacer & Sprocket (4000 Series) | A2581 |
| 4 | 1 | Trojan Drive Hub (4000 Series) | A2580-01 |
| 5 | 1 | FMB 4026DU | A2580-08 |
| 6 | 1 | 17T Plate Sprocket Tensioner | A2350-01 |
| 7 | 1 | 6200 Bearing | 9219 |
| 8 | 1 | Drive Leg Chain 1/2" @ 1450mm | A2580-06 |
| 9 | 1 | Drive Leg Cover Face Plate | A2580-02 |
| 10 | 1 | Drive Leg Tensioner Spacer | A2580-03 |
| 11 | 1 | Drive Leg Sprocket Keeper | A2580-04 |
| 12 | 1 | M6 Grease Nipple Straight | 9323 |
| 13 | 2 | M8 x 12 Grub Screw | 82155 |
| 14 | 1 | 10mm HD Flat Washer | 9040 |
| 15 | 1 | 10mm Spring Washer | 9041 |
| 16 | 1 | M10 Nut | 9141 |
| 17 | 1 | 4000 Drive Leg Tensioner Bolt | A2580-05 |
| 18 | 4 | M6 x 16 Bolt | 8208H |
| 19 | 4 | 6mm Spring Washer | 9021 |
| 20 | 2 | 6mm Flat Washer | 9023 |
| 21 | 4 | M6 Nut | 9121 |
| 22 | 4 | 6mm Fender Washer | 9022 |
| 23 | 1 | 1/2" Chain Half Link | ZCH1/2L |
| 24 | 1 | 1/2" Chain Joiner | ZCH1/2J |

AITCHISON INDUSTRIES

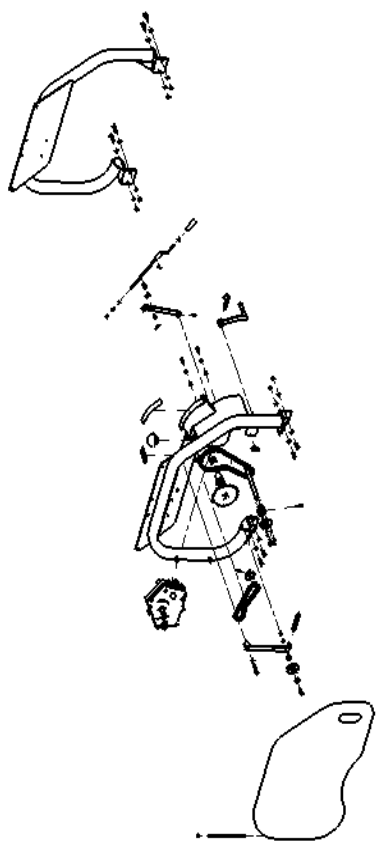
EXPLODED VIEW DRAWING

PRODUCT: Drive Leg Setup Parts

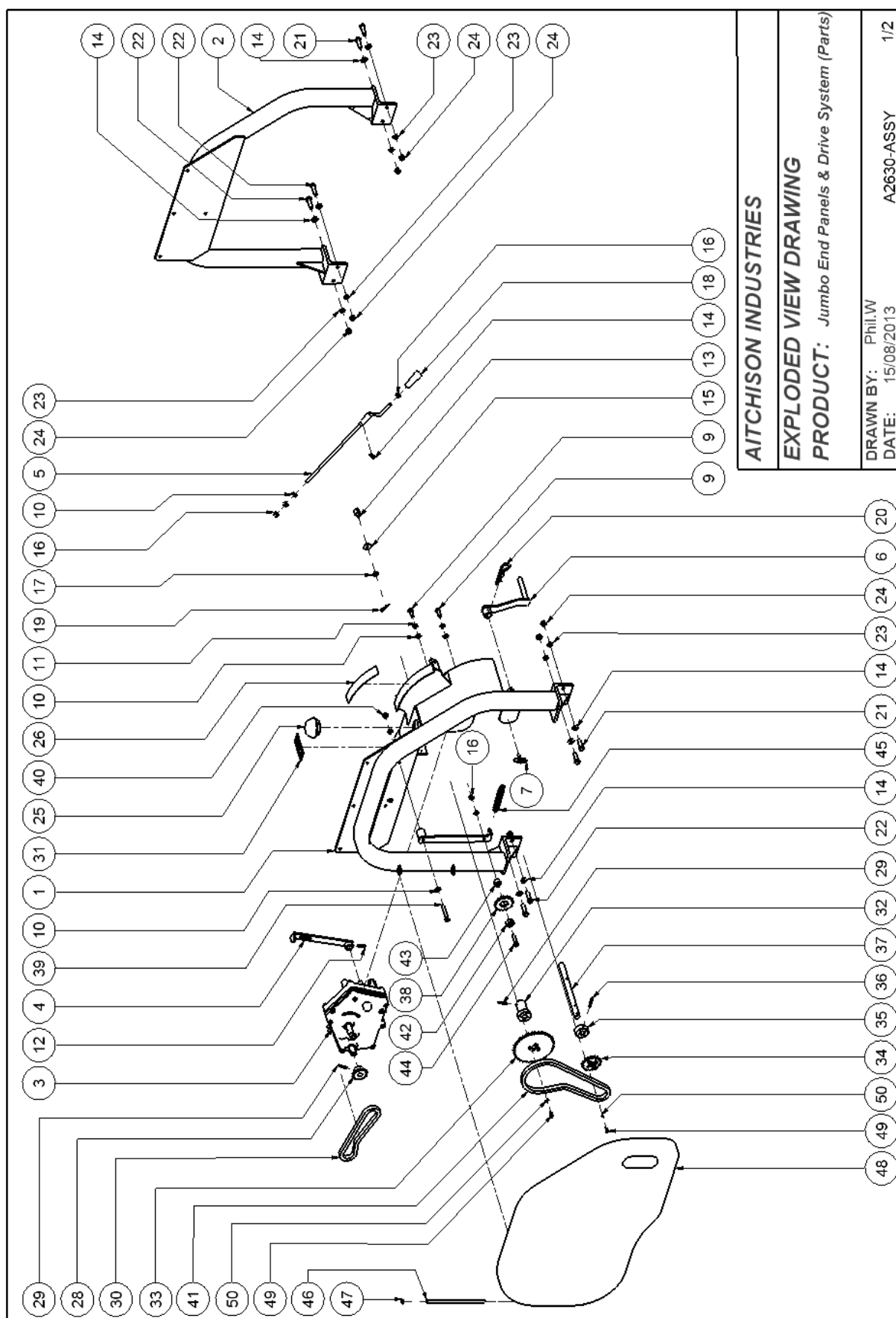
DRAWN BY: Phil.W
DATE: 17/07/2013
A2580-ASSY



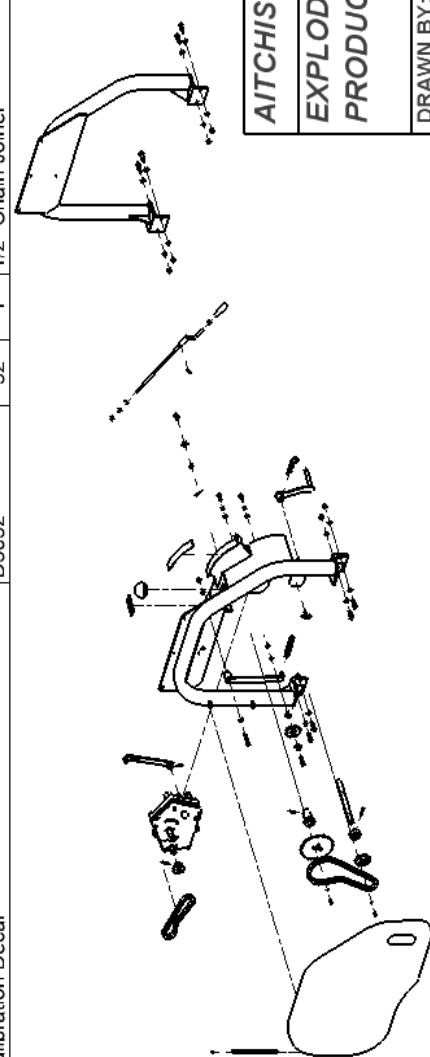
| Parts List | | | | Parts List | | | |
|------------|-----|---|-------------|------------|-----|-------------------------------------|-------------|
| ITEM | QTY | DESCRIPTION | PART NUMBER | ITEM | QTY | DESCRIPTION | PART NUMBER |
| 1 | 1 | 4000 Seed & Fert D-End Panel Assembly | A2531 | 27 | 1 | 38T Plate Sprocket ZP | A2344 |
| 2 | 1 | 4000 Seed & Fert Non-D-End Panel Assembly | A2532 | 28 | 1 | 4000 Gear Box Chain | A2530-06 |
| 3 | 1 | GF/Roller Gearbox Assembly | A2342 | 29 | 1 | 4000 Seed&Fert Lay Shaft | A2530-01 |
| 4 | 1 | Gearbox Calibration Pointer Assembly | A3570-04 | 30 | 1 | 4000 Seed&Fert G-B Tensioner Spacer | A2530-02 |
| 5 | 1 | Seed Adjuster Lever Assembly | A2333 | 31 | 1 | 17T Plate Sprocket Tensioner | A2350-01 |
| 6 | 1 | Seed Calibration Handle | A230-25 | 32 | 1 | 6200 Bearing | 9219 |
| 7 | 1 | 4000 Gear Box Tensioner Arm Assembly | A2533 | 33 | 1 | 65mm Plastic Cap | A3719-03 |
| 8 | 1 | M8 Anti-Luce Fastener | A2821-07 | 34 | 1 | M10 x 70 Bolt | 8423H |
| 9 | 3 | M10 x 30 Bolt | 8415H | 35 | 1 | M10 Nyloc Nut | 9142 |
| 10 | 6 | 10 mm Flat Washer | 9042 | 36 | 1 | M10 x 45 Bolt | 8404H |
| 11 | 4 | 10mm Spring Washer | 9041 | 37 | 1 | Seed Agitator Spring | A2338 |
| 12 | 1 | 5mm R Clip | 9289 | 38 | 1 | 17T Plate Sprocket 1/2" | A2347 |
| 13 | 9 | 12mm Flat Washer | 9051 | 39 | 1 | Sprocket Boss 3000 ZP | A2343-01 |
| 14 | 4 | M10 Nut | 9141 | 40 | 8 | M6 x 20 S/S Cap Screw | 8202S |
| 15 | 1 | Swivel Collar | A2334 | 41 | 8 | 6mm Spring Washer | 9021 |
| 16 | 1 | M10 Fender Washer | 9037 | 42 | 1 | Gearbox Calibration Decal | D3032 |
| 17 | 1 | 10mm HD Flat Washer | 9040 | 43 | 1 | 6 x 50 Roll Pin | 9262 |
| 18 | 1 | 2mm R Clip | 9282 | 44 | 1 | Decal 4000 Rodent Stop | D4001 |
| 19 | 1 | Plastic Knob Long | A2332 | 45 | 1 | 4000 Seed & Fert Drive Cover | A2530-04 |
| 20 | 4 | M12 x 40 Bolt | 8503H | 46 | 1 | M8 Nut | 9106 |
| 21 | 8 | 12mm Spring Washer | 9052 | 47 | 1 | 4000 End Panel Hinge Pin | A2530-05 |
| 22 | 8 | M12 Nut | 9152 | 48 | 1 | GB to SB Drive Chain | A2530-07 |
| 23 | 4 | M12 x 45 Bolt | 8504H | 49 | 1 | M10 Starlock Washer (Capped) | 9045 |
| 24 | 1 | 70mm Sprocket Boss | A2070-01 | 50 | 1 | 6 x 30 Roll Pin | 9250 |
| 25 | 1 | 13T Sprocket 1/2" Pitch Boss 20ID | A2339-01 | 51 | 2 | 1/2" Chain Half Link | ZCH1/2J |
| 26 | 2 | 6 x 40 Roll Pin | 9251 | 52 | 2 | 1/2" Chain Joiner | ZCH1/2L |



AITCHISON INDUSTRIES
EXPLODED VIEW DRAWING
PRODUCT: Seed / Fert End Panels & Drive System
(Part Numbers)
DRAWN BY: Phil W
DATE: 23/07/2013
A2530-ASSY
2/2



| Parts List | | | | Parts List | | | |
|------------|-----|---------------------------------------|-------------|------------|-----|-------------------------------------|-------------|
| ITEM | QTY | DESCRIPTION | PART NUMBER | ITEM | QTY | DESCRIPTION | PART NUMBER |
| 1 | 1 | 4000 Jumbo Drive End Panel Assembly | A2631 | 27 | 1 | M8 Nut | 9106 |
| 2 | 1 | 4000 Jumbo N-Drive End Panel Assembly | A2632 | 28 | 1 | 13T Sprocket 1/2" Pitch Boss 20ID | A2339-01 |
| 3 | 1 | GF/Roller Gearbox Assembly | A2342 | 29 | 2 | 6 x 40 Roll Pin | 9251 |
| 4 | 1 | Gearbox Calibration Pointer Assembly | A3570-04 | 30 | 1 | GB to SB Drive Chain | A2530-07 |
| 5 | 1 | Seed Adjustor Lever Assembly | A2333 | 31 | 1 | Decal 4000 Rodent Stop | D4001 |
| 6 | 1 | Seed Calibration Handle | A230-25 | 32 | 1 | 70mm Sprocket Boss | A2070-01 |
| 7 | 1 | M8 Anti-Luce Fastener | A2821-07 | 33 | 1 | 38T Plate Sprocket ZP | A2344 |
| 8 | 1 | 4000 Gear Box Tensioner Arm Assembly | A2533 | 34 | 1 | 17T Plate Sprocket 1/2" | A2347 |
| 9 | 3 | M10 x 30 Bolt | 8415H | 35 | 1 | Sprocket Boss 3000 ZP | A2343-01 |
| 10 | 6 | 10 mm Flat Washer | 9042 | 36 | 1 | 6 x 50 Roll Pin | 9262 |
| 11 | 4 | 10mm Spring Washer | 9041 | 37 | 1 | 4000 Jumbo Lay Shaft | A2630-01 |
| 12 | 1 | 6 x 30 Roll Pin | 9250 | 38 | 1 | 17T Plate Sprocket Tensioner | A2350-01 |
| 13 | 1 | Swivel Collar | A2334 | 39 | 1 | M10 x 70 Bolt | 8423H |
| 14 | 9 | 12mm Flat Washer | 9051 | 40 | 1 | M10 Nyloc Nut | 9142 |
| 15 | 1 | M10 Fender Washer | 9037 | 41 | 1 | 4000 Gear Box Chain | A2530-06 |
| 16 | 4 | M10 Nut | 9141 | 42 | 1 | 6200 Bearing | 9219 |
| 17 | 1 | 10mm HD Flat Washer | 9040 | 43 | 1 | 4000 Seed&Fert G-B Tensioner Spacer | A2530-02 |
| 18 | 1 | Plastic Knob Long | A2332 | 44 | 1 | M10 x 45 Bolt | 8404H |
| 19 | 1 | 2mm R Clip | 9282 | 45 | 1 | Seed Agitator Spring | A2338 |
| 20 | 1 | 5mm R Clip | 9289 | 46 | 1 | 4000 End Panel Hinge Pin | A2530-05 |
| 21 | 4 | M12 x 40 Bolt | 8503H | 47 | 1 | M10 Star Cap | 9045 |
| 22 | 4 | M12 x 45 Bolt | 8504H | 48 | 1 | 4000 Jumbo Drive Cover | A2630-02 |
| 23 | 8 | 12mm Spring Washer | 9052 | 49 | 8 | M6 x 20 S/S Cap Screw | 8202S |
| 24 | 8 | M12 Nut | 9152 | 50 | 8 | 6mm Spring Washer | 9021 |
| 25 | 1 | 65mm Plastic Cap | A3719-03 | 51 | 1 | 1/2" Chain Half Link | ZCH1/2L |
| 26 | 1 | Gearbox Calibration Decal | D3032 | 52 | 1 | 1/2" Chain Joiner | ZCH1/2J |

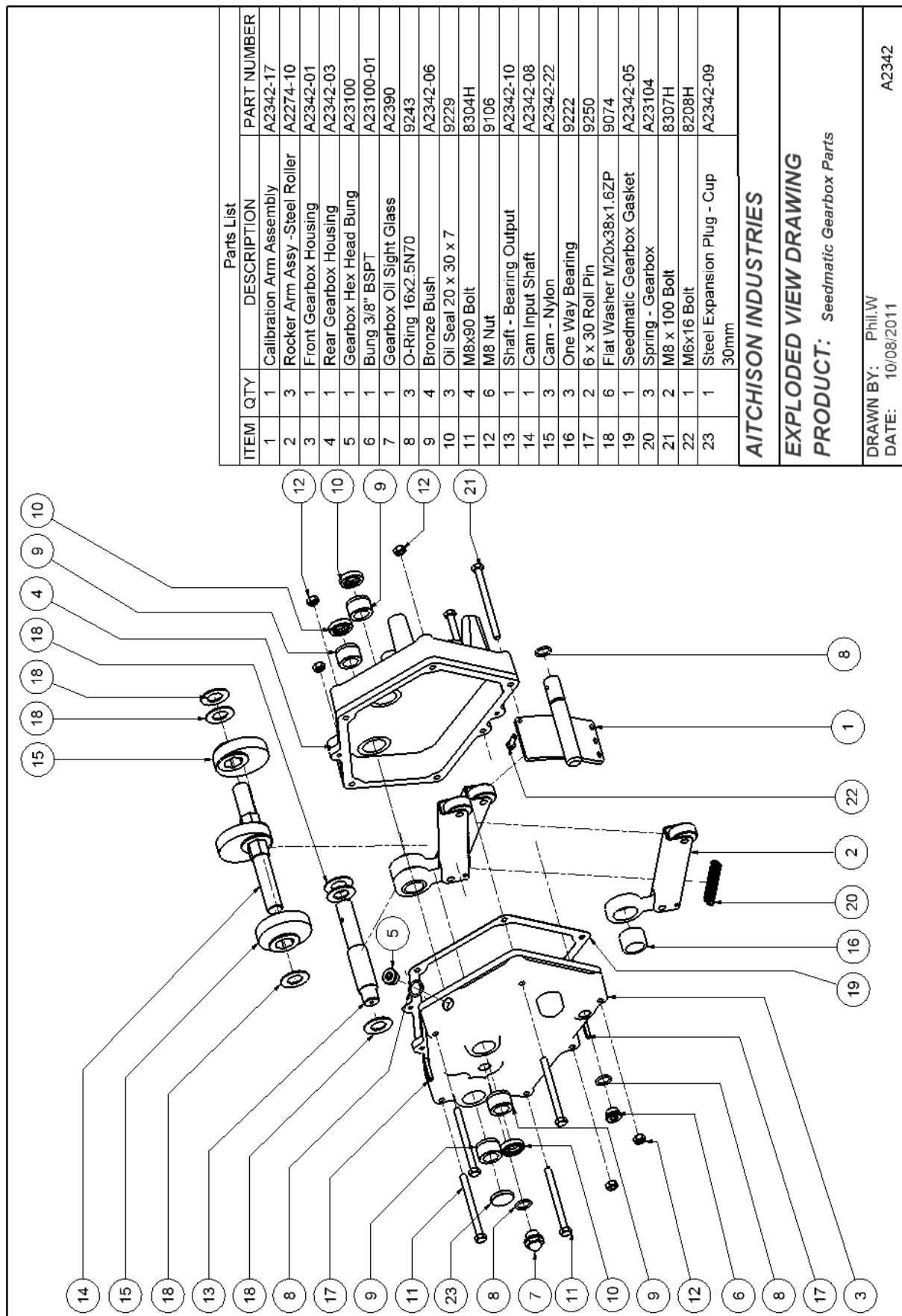


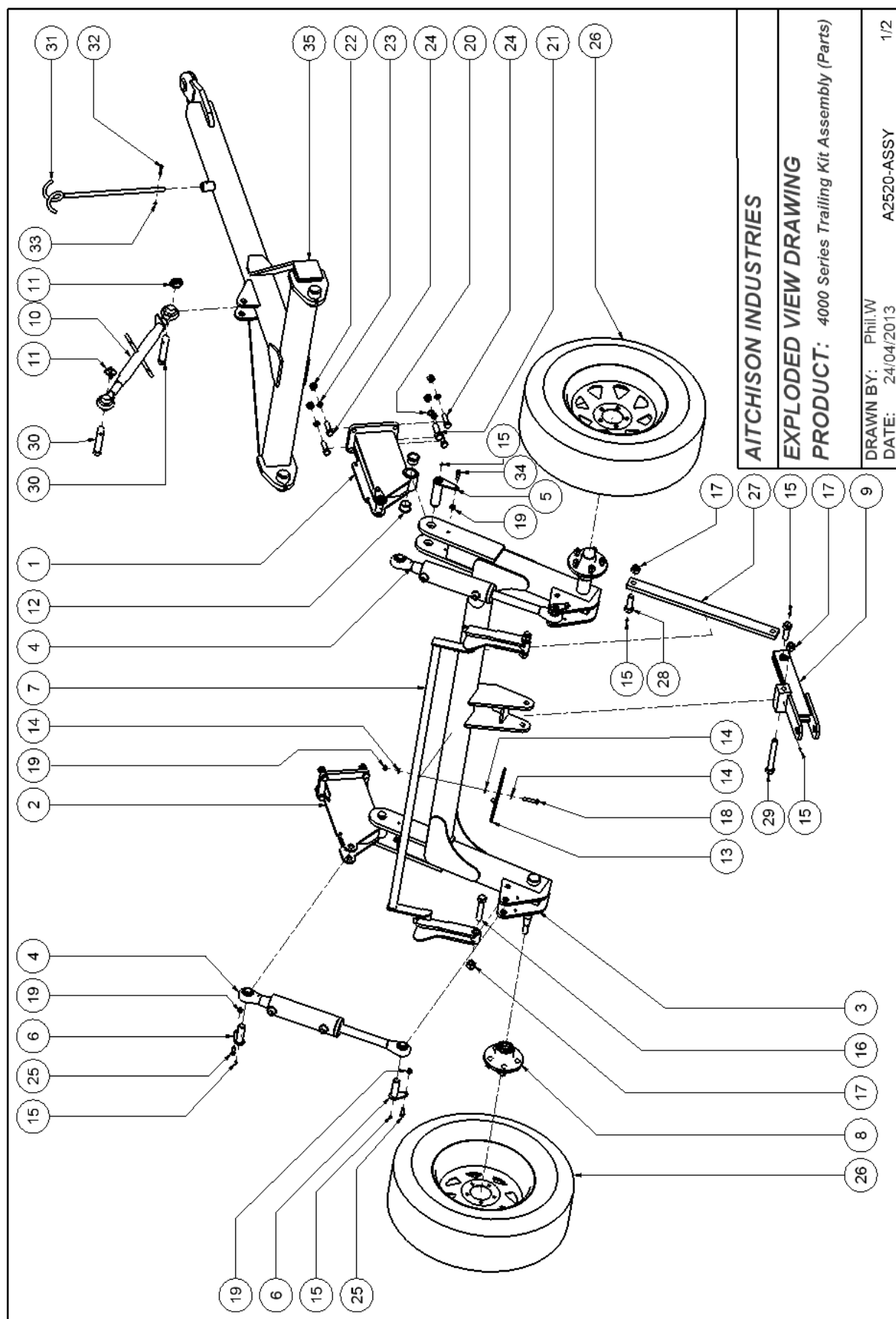
AITCHISON INDUSTRIES
EXPLODED VIEW DRAWING
PRODUCT: Jumbo End Panels & Drive System
(Numbers)

DRAWN BY: Phil.W
DATE: 16/08/2013

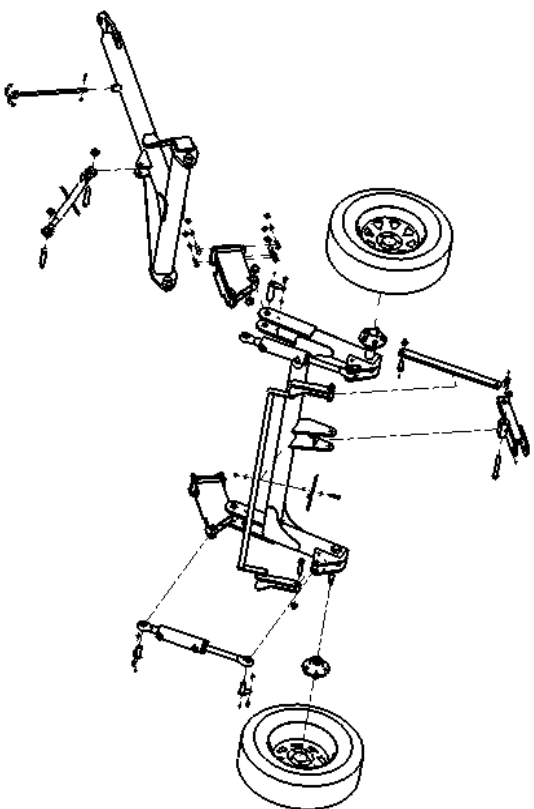
A2630-ASSY

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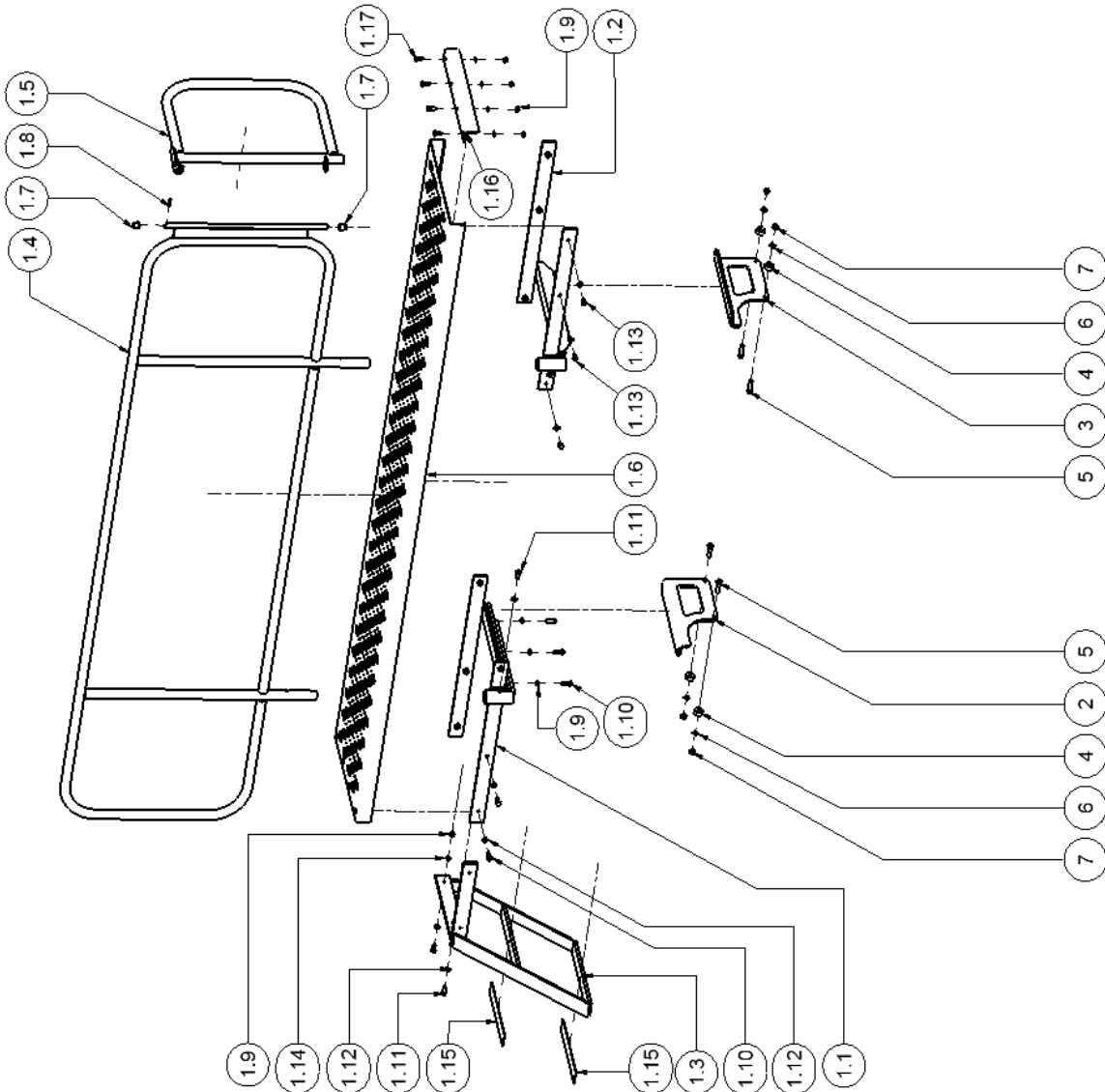
| Parts List | | | | Parts List | | | |
|------------|-----|--|-------------|------------|-----|-----------------------------|-------------|
| ITEM | QTY | DESCRIPTION | PART NUMBER | ITEM | QTY | DESCRIPTION | PART NUMBER |
| 1 | 1 | Rear Axle Pivot Mount RH Assembly | A2521RH | 19 | 7 | M10 Nyloc Nut | 9142 |
| 2 | 1 | Rear Axle Pivot Mount LH Assembly | A2521LH | 20 | 2 | 20mm Spring Washer | 9076 |
| 3 | 1 | Rear Transport Axle Assembly | A2523 | 21 | 2 | M20 x 60 Bolt | 8712H |
| 4 | 2 | 2.5" x 1.25" x 7" Compact Top Link Ram | A2520-03 | 22 | 8 | M16 Nut | 9161 |
| 5 | 2 | Rear Axle Pivot Pin Assembly | A2524 | 23 | 8 | 16mm Spring Washer | 9061 |
| 6 | 4 | Rear Axle Ram Pin Assembly | A2525 | 24 | 8 | M16 x 55 Bolt | 8603H |
| 7 | 1 | Rear Axle Lock Assembly | A2526 | 25 | 4 | M10 x 30 Bolt | 8415H |
| 8 | 2 | Trojan 5 Stud Hub | TR 082030 | 26 | 2 | 235 -70/R15 Wheel Assembly | A3127-01 |
| 9 | 1 | Rear Tow Hitch Tongue Assembly | A2527 | 27 | 1 | Rear Axle Tow Eye Link | A2520-02 |
| 10 | 1 | Cat 2 Turnbuckle | A23189-01 | 28 | 2 | Rear Axle Towbar Link Bolt | A5185-05 |
| 11 | 2 | 11mm Lynch Pin | 9288 | 29 | 1 | M20 x 150 Bolt | 8702 |
| 12 | 4 | FMB 3526DU | A3710-53 | 30 | 2 | Top Link Pin B76 | A23189-02 |
| 13 | 1 | Rear Axle Lock Lever | A2520-01 | 31 | 1 | Hydrolic Hose Pig Tail Pole | A23188-14 |
| 14 | 3 | 10 mm Flat Washer | 9042 | 32 | 1 | M6 x 45 Bolt | 8203H |
| 15 | 9 | M6 Grease Nipple Straight | 9323 | 33 | 1 | M6 Nyloc Nut | 9109 |
| 16 | 2 | M20 x 100 Bolt | 8709H | 34 | 2 | M10 x 35 Bolt | 8402H |
| 17 | 5 | M20 Nyloc Nut | 9122 | 35 | 1 | 4000 Drawbar Assembly | A2528 |
| 18 | 1 | M10 x 55 Bolt | 8427H | 37 | 1 | Trailing Hydraulic Hose Kit | A3127-02 |

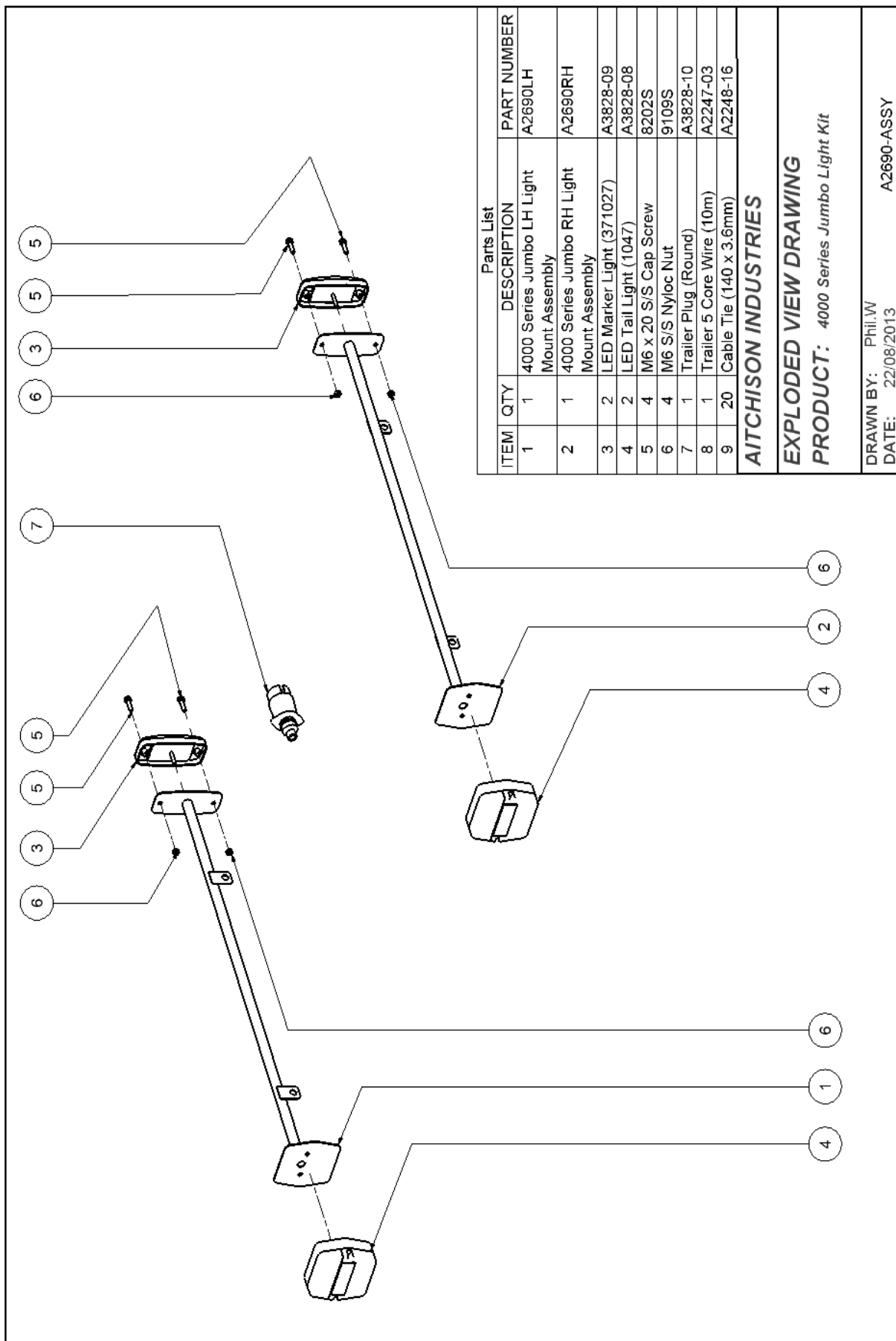


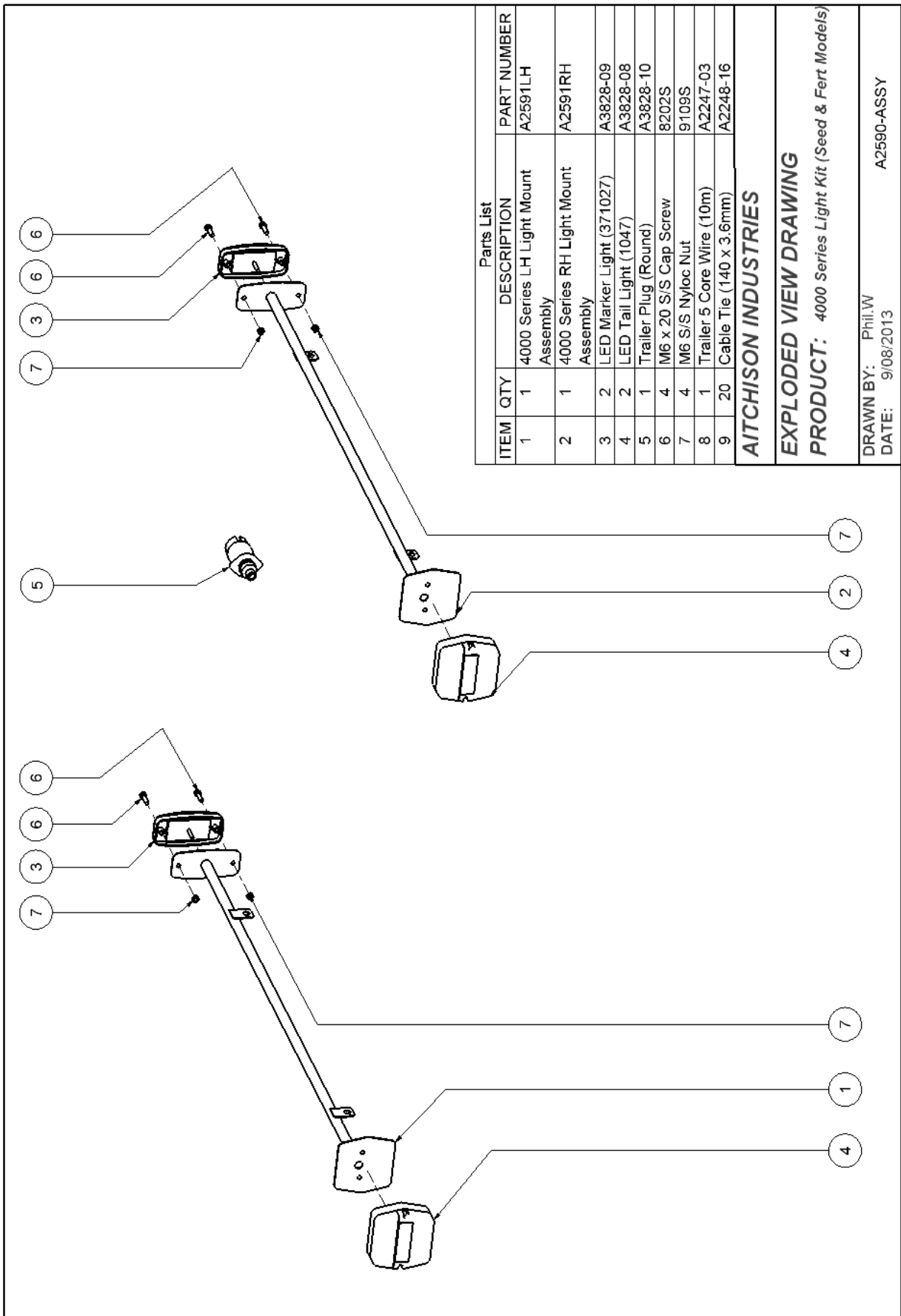
AITCHISON INDUSTRIES
EXPLODED VIEW DRAWING
PRODUCT: 4000 Series Trailing Kit (Part Numbers)

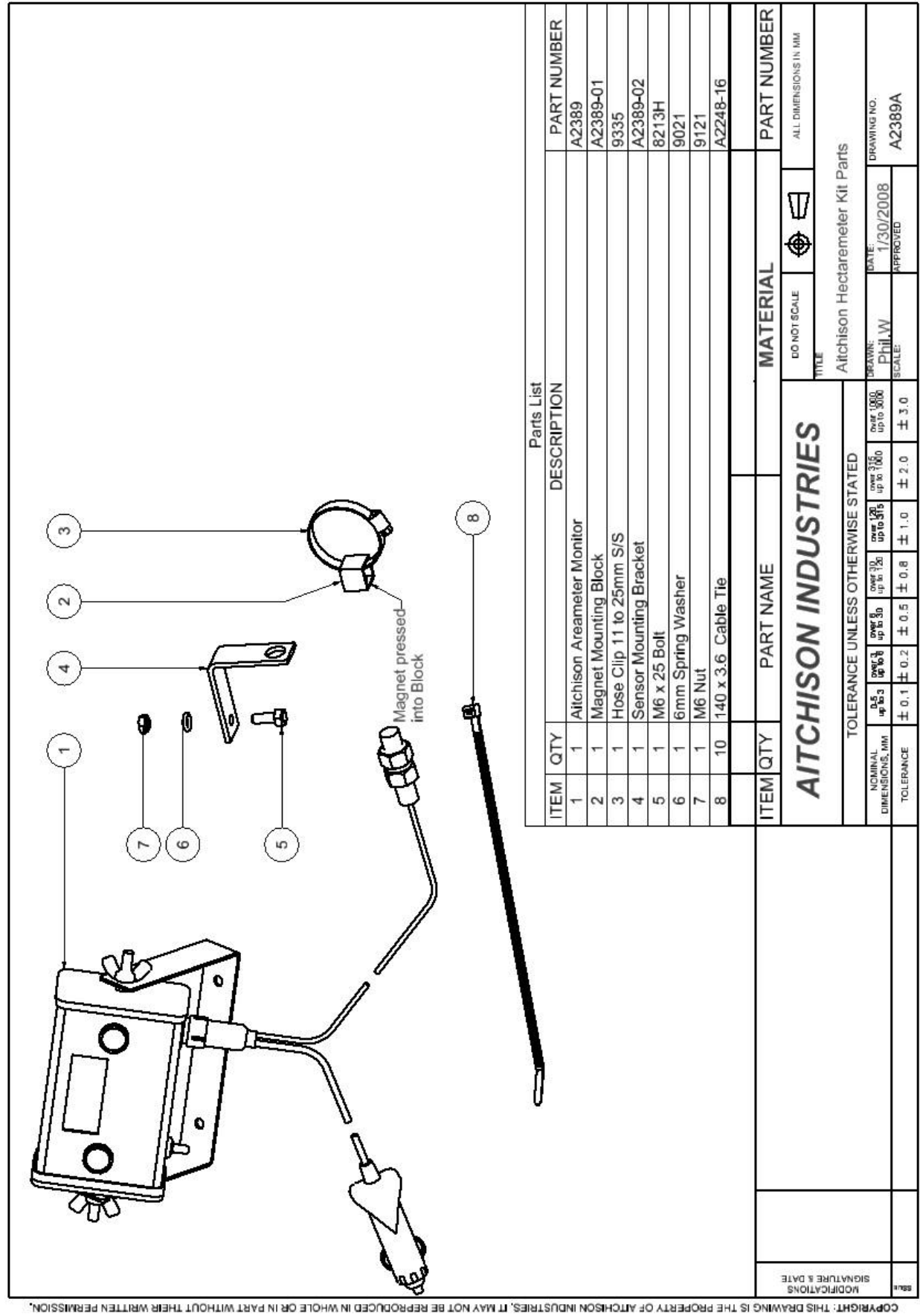
DRAWN BY: Phil.W
DATE: 24/04/2013
A2520-ASSY
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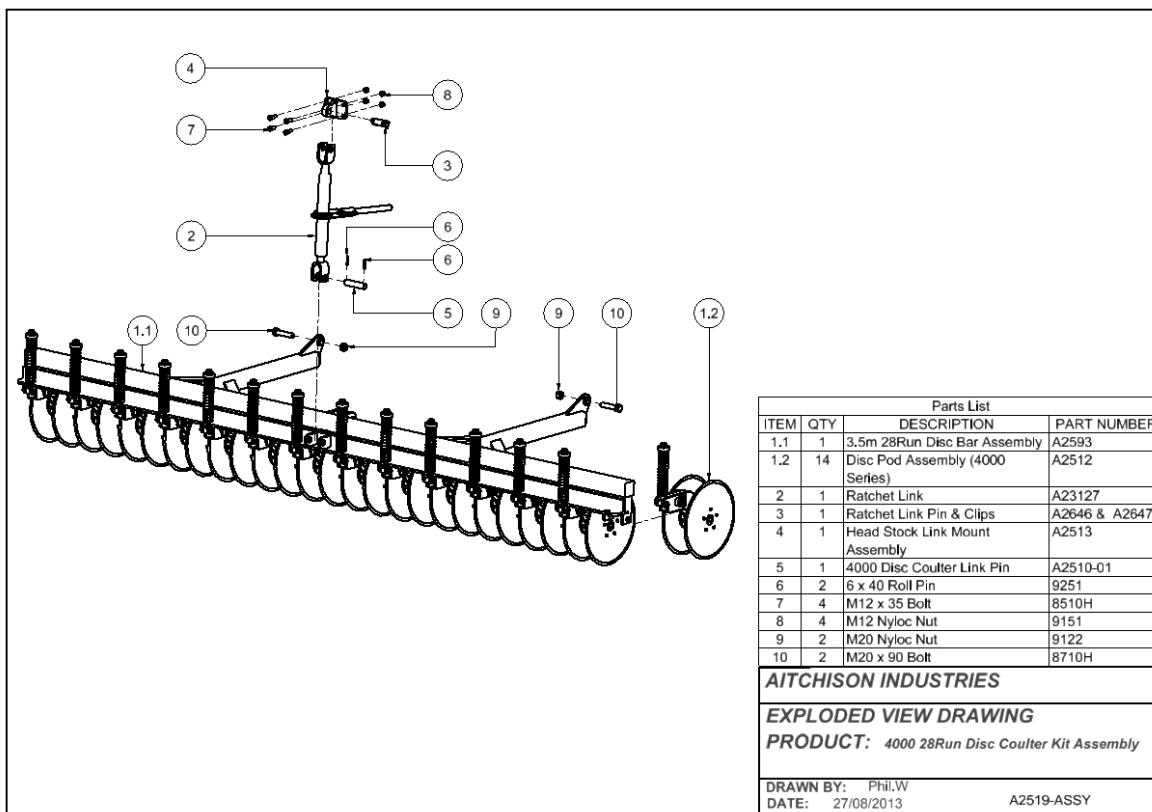
| Parts List | | | |
|--|-----|--|-------------|
| ITEM | QTY | DESCRIPTION | PART NUMBER |
| 1.1 | 1 | 8000 Series Safety Rail Clamp LH Assembly | A3107L |
| 1.2 | 1 | 8000 Series Safety Rail Clamp RH Assembly | A3107R |
| 1.3 | 1 | Treadboard Step | A3004 |
| 1.4 | 1 | 8000 Series Main Safety Rail Assembly | A3108 |
| 1.5 | 1 | 8000 Series End Safety Rail Assembly | A3110 |
| 1.6 | 1 | 2.6m x 0.5m Tread Board | A2249-05 |
| 1.7 | 2 | S 210M Flanged Bush | A2357 |
| 1.8 | 1 | 6 x 30 Roll Pin | 9250 |
| 1.9 | 28 | M10 Nut | 9141 |
| 1.10 | 8 | M10 x 30 Bolt | 8415H |
| 1.11 | 4 | M10 x 25 Bolt | 8418H |
| 1.12 | 14 | 10 mm Flat Washer | 9042 |
| 1.13 | 10 | M10 x 20 Bolt | 8419H |
| 1.14 | 22 | 10mm Spring Washer | 9041 |
| 1.15 | 2 | Anti-Slip Tape (Black 50 x 300) | A3107-06 |
| 1.16 | 2 | 2.6m x 0.5m Tread Board Cap | A257-04 |
| 1.17 | 8 | M10 x 25 Coach Bolt | 8412 |
| 2 | 1 | 4000 LH Treadboard Mount | A2570-05 |
| 3 | 1 | 4000 RH Treadboard Mount | A2570-06 |
| 4 | 4 | 4000 Treadboard Mount Spacer | A2570-07 |
| 5 | 4 | M12 x 45 Bolt | 8504H |
| 6 | 4 | 12mm Spring Washer | 9052 |
| 7 | 4 | M12 Nut | 9152 |
| AITCHISON INDUSTRIES | | | |
| EXPLODED VIEW DRAWING | | | |
| PRODUCT: 4000 Treadboard Parts Assembly | | | |
| DRAWN BY: Phil.W DATE: 30/07/2013 A2570-ASSY | | | |





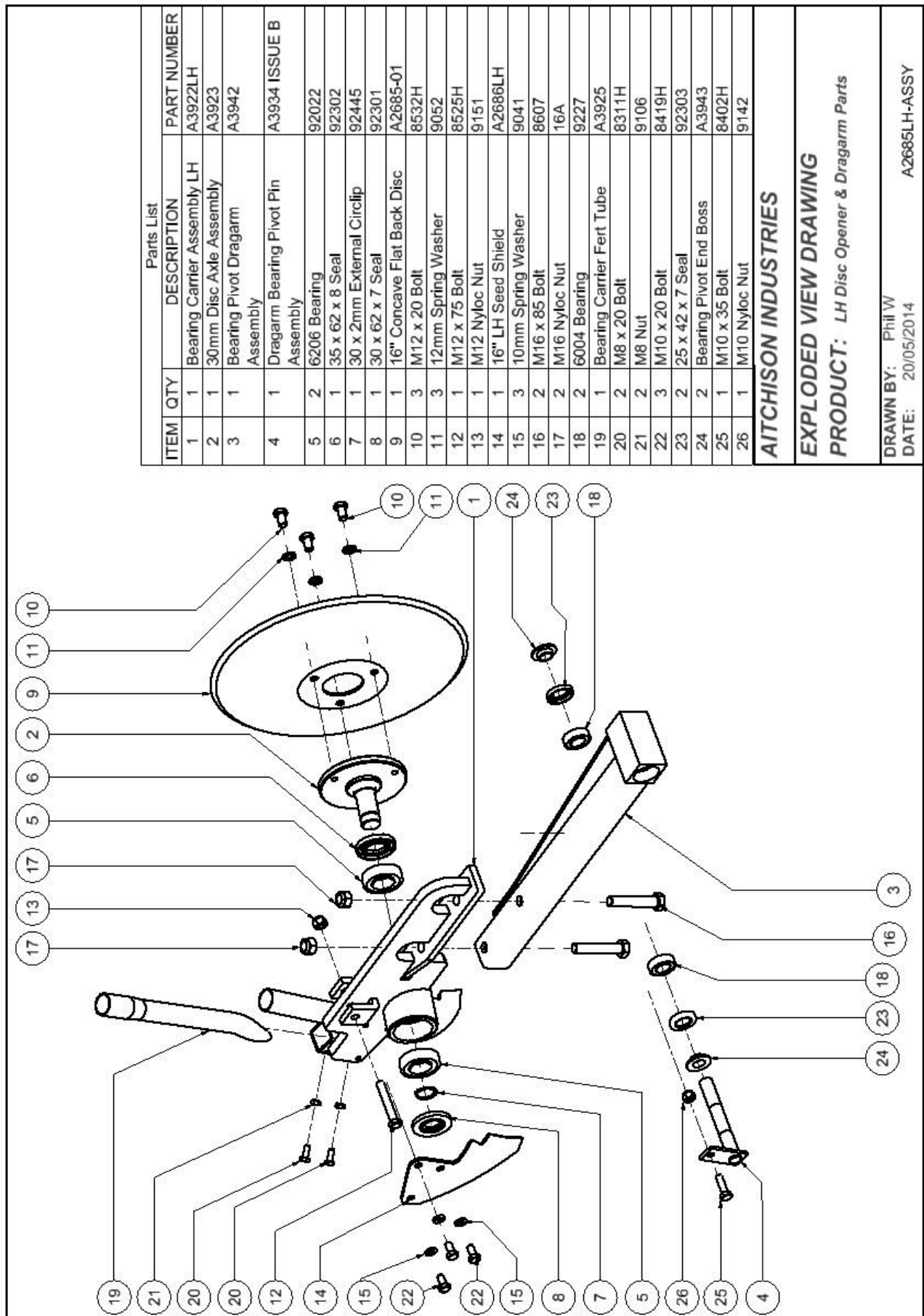




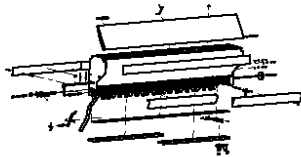


| IT | Q | DESCRIPTION | PART NUMBER |
|----|---|---|----------------|
| 1 | 1 | Bearing Pivot Bearing Carrier Assembly Centre | A3920 ISSUE B |
| 2 | 2 | 30mm Disc Axle Assembly | A3923 |
| 3 | 1 | Bearing Pivot Centre Dragarm Assy | A3926 ISSUE B |
| 4 | 1 | Bearing Pivot Centre Front Dragarm Pin Assembly | A3933F ISSUE B |
| 5 | 1 | Twin Centre Disc Link Arm Assembly | A3927 |
| 6 | 4 | 6206 Bearing | 92022 |
| 7 | 2 | 35 x 62 x 8 Seal | 92302 |
| 8 | 2 | 30 x 62 x 7 Seal | 92301 |
| 9 | 2 | 30 x 2mm External Circlip | 92445 |
| 10 | 2 | 16" Concave Flat Back Disc | A2685-01 |
| 11 | 6 | M12 x 20 Bolt | 8532H |
| 12 | 6 | 12mm Spring Washer | 9052 |
| 13 | 1 | 16" RH Seed Shield | A2686RH |
| 14 | 1 | 16" LH Seed Shield | A2686LH |
| 15 | 6 | 10mm Spring Washer | 9041 |
| 16 | 2 | M12 Nyloc Nut | 9151 |
| 17 | 2 | Bearing Carrier Fert Tube | A3925 |
| 18 | 2 | M12 x 55 Bolt | 8512H |
| 19 | 4 | M8 x 20 Bolt | 8311H |
| 20 | 1 | M10 x 30 Bolt | 8415H |
| 21 | 2 | M10 Nyloc Nut | 9142 |
| 22 | 6 | M10 x 20 Bolt | 8419H |
| 23 | 4 | 6004 Bearing | 9227 |
| 24 | 4 | 25 x 42 x 7 Seal | 92303 |
| 25 | 4 | Bearing Pivot End Boss | A3943 |
| 26 | 1 | M10 x 35 Bolt | 8402H |
| 27 | 1 | 3/4" x 3 1/2" Bolt UNF | 8620 |
| 28 | 2 | 3/4" Conelock Nut UNF | 91941 |
| 29 | 2 | Centre Dragarm Link Spacer | A2685-02 |
| 30 | 1 | 3/4 x 5" UNF Bolt ZP | 8622 |
| 31 | 4 | M8 Nut | 9106 |
| 32 | 1 | Bearing Pivot Centre Rear Dragarm Pin Assembly | A3933R ISSUE B |

| | | |
|--|-------------|--|
| AITCHISON INDUSTRIES | | |
| EXPLODED VIEW DRAWING | | |
| PRODUCT: Centre Disc Opener & Dragarm Parts | | |
| DRAWN BY: Phil W | A2685C-ASSY | |
| DATE: 20/05/2014 | | |



| ITEM | QTY | DESCRIPTION | PART NUMBER | ITEM | QTY | DESCRIPTION | PART NUMBER |
|------|-----|--|-------------|------|-----|--|-------------|
| 1 | 1 | 28Run Seed Box Assembly | A2574 | 36 | 1 | 28Run Seed D-S Rear Inspection Panel | A2573-04 |
| 2 | 4 | 3" x 2" S/S Butt Hinge | A23805 | 37 | 1 | 28Run Seed Non-D-S Rear Inspection Panel | A2573-05 |
| 3 | 28 | Sponge Pad & Disc | A2364 | 38 | 1 | 4000 28Run Agitator Shaft | A2573-06 |
| 4 | 1 | 28Run Front D-S Calibration Panel Assembly | A2575 | 39 | 1 | 4000 End Panel Rodent Handle | A2540-11 |
| 5 | 1 | 28Run Front Non-D-S Calibration Panel Assembly | A2576 | 40 | 1 | 8mm Flat Washer | 9031 |
| 6 | 1 | Seed Shaft Mount | A2337 | 41 | 1 | M8 x 20 Bolt | 8311H |
| 7 | 1 | 13T Sprocket 1/2" Agitator Boss | A28025 | 42 | 1 | M8 Nyloc Nut | 9105 |
| 8 | 1 | 4000 Series Seed Lid Assembly (28Run) | A2577 | 43 | 6 | S 210M Flanged Bush | A2357 |
| 9 | 1 | 35mm Seed Dropper Hose / Meter | A2384-01 | 44 | 28 | Agitator Shaft R Clip | A2359 |
| 10 | 4 | 4000 Series Blank Off Plate Retainer | A2540-01 | 45 | 1 | 16mm Locking Collar | A2360 |
| 11 | 1 | 4000 Series D-End Seed Tray (28Run) | A2573-01 | 46 | 1 | Agitator Boss | A28034-02 |
| 12 | 1 | 4000 Series Non-D-End Seed Tray (28Run) | A2573-02 | 47 | 1 | 4000 Adjustator Shaft Arm | A2540-12 |
| 13 | 1 | 4000 Series Rodent Stop Slide (28Run) | A2573-03 | 48 | 1 | Agitator Arm Link | A28008 |
| 14 | 1 | 4000 Series Rodent Stop Link Wire | A2540-05 | 49 | 2 | Agitator Link Bolt | A2618-04 |
| 15 | 1 | 4000 Series Rodent Stop Link Arm | A2540-06 | 50 | 2 | S 15 Flanged Bush | A2352 |
| 16 | 16 | M6x20 Bolt | 8205H | 51 | 1 | M6 Grease Nipple Straight | 9323 |
| 17 | 9 | M6 Nyloc Nut | 9109 | 52 | 1 | Seed Shaft Axle | A2361 |
| 18 | 1 | 4000 Series Rodent Stop Lever Wire | A2540-07 | 55 | 1 | 4000 28Run Seed Shaft | A2573-07 |
| 19 | 16 | 6-8 S/S Rivet | 9302 | 56 | 4 | S 206M Flanged Bush | A2355 |
| 20 | 7 | 6mm Fender Washer | 9022 | 57 | 10 | 10 mm Flat Washer | 9042 |
| 21 | 19 | M6 Nut | 9121 | 58 | 1 | M10 Nyloc Nut | 9142 |
| 22 | 19 | 6mm Spring Washer | 9021 | 59 | 1 | Nylon Tensioner Roller | A2336-04 |
| 23 | 4 | M6 x 25 Bolt | 8213H | 60 | 1 | M12 x 65 Bolt | 8507H |
| 24 | 4 | Seed Tray Clip | A3040-07 | 61 | 2 | M12 Nut | 9152 |
| 25 | 4 | M6 Cross Knob | 9122 | 62 | 2 | 12mm Flat Washer | 9051 |
| 26 | 8 | 6mm S/S Fender Washer | 9022S | 63 | 8 | 10mm Spring Washer | 9041 |
| 27 | 4 | M6 S/S Nut | 9121S | 64 | 6 | M10 x 25 Bolt | 8418H |
| 28 | 4 | M6 x 20 S/S Bolt | 8205S | 65 | 6 | M10 Nut | 9141 |
| 29 | 4 | M6 x 50 SS Bolt | 8210S | 66 | 1 | 3M Yellow Panel Decal | D1513 |
| 30 | 4 | Agrisped Spinner Disc Spring | A4619 | 67 | 2 | M10 x 65 Bolt | 8417H |
| 31 | 28 | Seed Pad Spring | A2280-10 | 68 | 1 | 4000 Series Lid Stay | A2540-15 |
| 32 | 28 | S 9 Plastic Bush | A2280-11 | 69 | 1 | 3 x 20 Roll Pin | 9267 |
| 33 | 14 | Fert Cup Angled | A2290-13 | 70 | 4 | Buffer Pad | A2375 |
| 34 | 14 | Fert Cup Straight | A2290-12 | 71 | 1 | 6 x 40 Roll Pin | 9251 |
| 35 | 28 | 35mm Cray Clip | A2370 | 72 | 1 | M10 x 20 Bolt | 8419H |



AITCHISON INDUSTRIES
EXPLODED VIEW DRAWING
PRODUCT: 28Run "D" Seed Box & Parts Assembly
(Numbers)

DRAWN BY: Phil.W
DATE: 24/07/2013 A2656-ASSY 2/2