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## SEED DRILL

## OPERATORS MANUAL

**From the following Serial Numbers forward:  
TD1914, SD1414, DF1114, ED1014**



Model Number: \_\_\_\_\_

Serial Number: \_\_\_\_\_

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## INTRODUCTION

Davimac thanks you for purchasing one of our products.

The range of Davimac Seed Drills has been developed to cater for the needs of the progressive farmer. Davimac has drawn on its years of experience in the seeding industry to build a range of planters that have an accurate metering system and precise depth control. With heavy duty frame construction, and a high quality drive system, this ensures a quality built product for the farmer who only wants the best.

It is the responsibility of the user to understand the operation, safety, maintenance and lubrication before operating the Seed Drill. It is the user's responsibility to check and service the machine as specified in this Manual.

This manual will familiarise you with safety, assembly, operation, adjustments, maintenance and troubleshooting aspects of the machine.

Reading this manual, and following the recommendations within it, will help to ensure safe and efficient operation, as well as years of satisfactory use from the machine.

### Models Covered in this Manual

- TD Drill
- SD Drill
- DF Drill
- ED Drill

### Options Covered in this Manual

- Small Seed Box
- Disc Coulters

### Description of Unit

The Seed Drill is designed so you have the flexibility to configure the planter to suit your requirements. Features including powder coated large capacity seed and fertiliser boxes which can sow a large range of seeds and fertilisers from both boxes.

The seeding/fertiliser rate can be infinitely varied simply by moving a lever. The boxes also have a clean out plate for easy clean out.

The large space of 450 to 600mm between tool bars improves trash handling ability.

The Seed Drills come in a range of sizes from 10 rows to 28 rows in 125mm (5") to 300mm (12") spacing's and can have larger row spacing's if required.

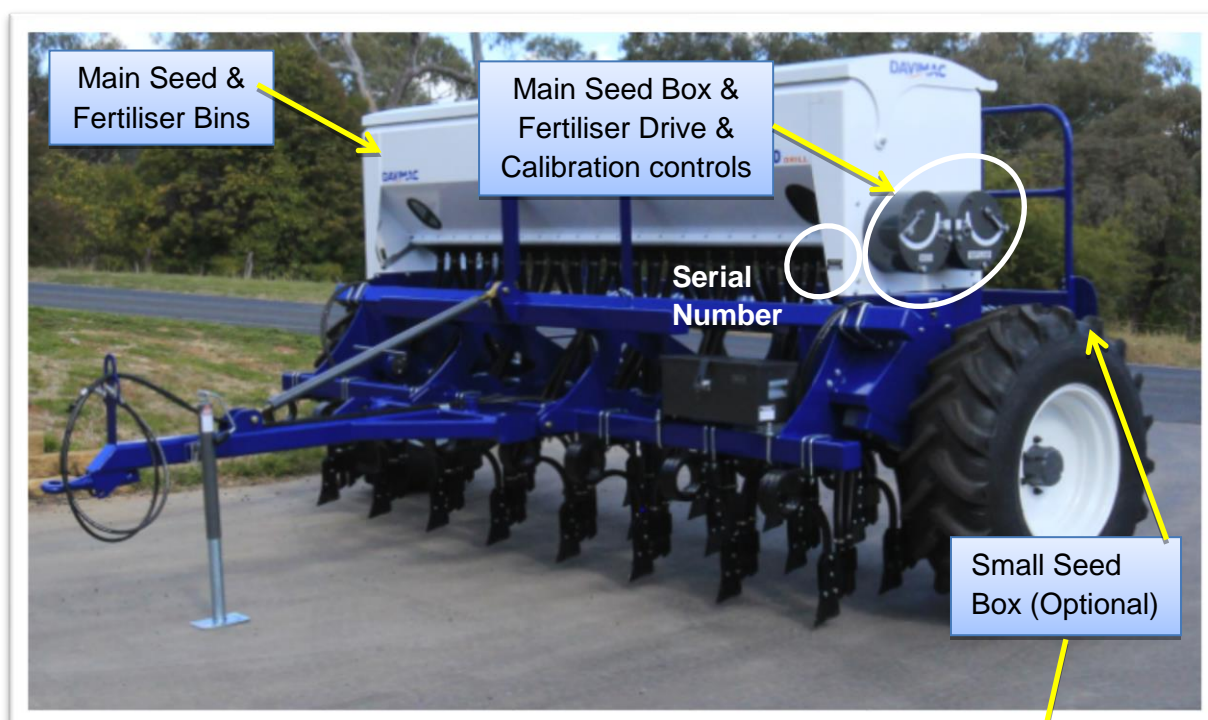
High flotation tyres mean more accurate seed placement and less compaction.

## Standard Features:

- Heavy duty frame manufactured from 100x100x5 RHS and plate (16mm and 12mm) and powder coated for a long lasting and quality finish.
- The seed box has an extra-large capacity and large windows to keep an eye on gain levels. The box is powder coated to prevent rust.
- Heavy duty floatation wheels are fitted as standard and the wheels are mounted on a heavy duty stub axle and swing arm.
- High quality coil tynes as standard with your choice of cast points.

## Options:

- Small seed box can be fitted as an option to under sow or to sow at rates below 4kgs (depending on seed).
- Choice of tynes, 1" coil tynes or spring release tynes for better trash clears and better handling of rocks.
- Dual band sowing.
- Press wheels.
- The disc coulters have a large 16" disc, quality bearings with triple lip seals. The coulters also benefit from having Teflon lined pivot bushes to give greater life and to reduce maintenance.





## WARRANTY

Davimac Pty Ltd warrants against defects in materials or workmanship for 1 year from date of delivery.

Davimac Pty Ltd reserves the right to inspect and decide whether material or workmanship was the cause of the fault, or whether the fault was as a result of abuse, accident, misuse or improper maintenance or servicing thus voiding warranty.

Warranty service must be undertaken by a dealer or service centre approved by Davimac Pty Ltd. Warranty service will be performed without charge to the purchaser if the warranty claim is valid. If the original purchaser sells or transfers this product to a third party the warranty does not transfer to the third party in any way.

To process a warranty claim first contact the dealer who sold the unit and provide the serial number of your unit and details of the problem you are experiencing. The dealer will then contact Davimac Pty Ltd to get approval to assess your machine and to proceed with any warranted repairs.

Davimac Pty Ltd will provide replacement parts and repairs but does not cover additional costs incurred for travel and transport beyond work at the approved service location. Excluded from warranty are travel, transport and labour costs for repairs or replacement parts when the owner elects for these to occur at a location other than an approved service location.

Davimac Pty Ltd reserves the right to make product design changes at any time without notice. They shall not be obligated or liable for the replacement of previously sold products that do not match design updates included in latest models.

Note: Davimac Pty Ltd does not warrant faults relating to wheel nut tightness. It is the responsibility of the operator to check and maintain wheel nut torque on a regular basis. (Refer to the Maintenance section of this manual for requirements).

## Serial Number

The serial-number is located at the end of the front tool bar.

Record your seed drill serial number on the front cover of this manual for quick reference.

Quote this number when ordering spare parts, or when you require service.



## SAFETY

It is the responsibility of the operator to know how to operate and service the machine safely.

Thoroughly read and understand the instructions in this manual before operating or servicing the machine. Read all instructions noted on the safety decals.

Below are identified safety points. Identified safety risks can never be considered comprehensive and the operator should always do a safety evaluation of the machine within the operating environment before operating the machine.

### General

- Be familiar with all drill functions.
- Operate machinery from the driver's seat only.
- Do not leave drill unattended with tractor engine running.
- Do not dismount a moving tractor.
- Keep hands, feet and clothing away from driven parts.
- Wear snug-fitting clothing to avoid entanglement with moving parts.
- Make sure all persons are clear of working area.
- Do not turn tractor too tightly, causing drill to ride up on wheels. This could cause personal injury or equipment damage.
- Never permit any persons other than the operator to ride on the tractor.
- Never ride on the planter or allow others to ride on the planter.
- Do not allow anyone to stand between the hitch and towing vehicle when backing up to the planter.
- Never work under planter when machine is in the raised position unless the ram safety stops are in.
- Never allow anyone within the immediate area when working.
- Don't operate or do maintenance on the planter unless you are trained to do so.
- Before doing any maintenance do a safety evaluation.
- When maintaining, repairing or storing the seed drill always make sure it is parked on flat level ground, the jack is engaged and the key is removed from the tractor ignition.
- Do not service the hydraulics while there is pressure in the system.

Throughout this manual, important safety information is indicated by these symbols.



A Blue Caution indicates a hazard that may cause damage to property if the caution is ignored.



A Yellow Warning indicates a hazard that could cause injury or death if the warning is ignored.

## Protective Equipment

Wear protective clothing and equipment.

- Wear clothing and equipment appropriate for the job.
- Avoid loose-fitting clothing.
- Wear suitable hearing protection such as earmuffs or earplugs.
- Avoid wearing radio headphones while operating machinery.

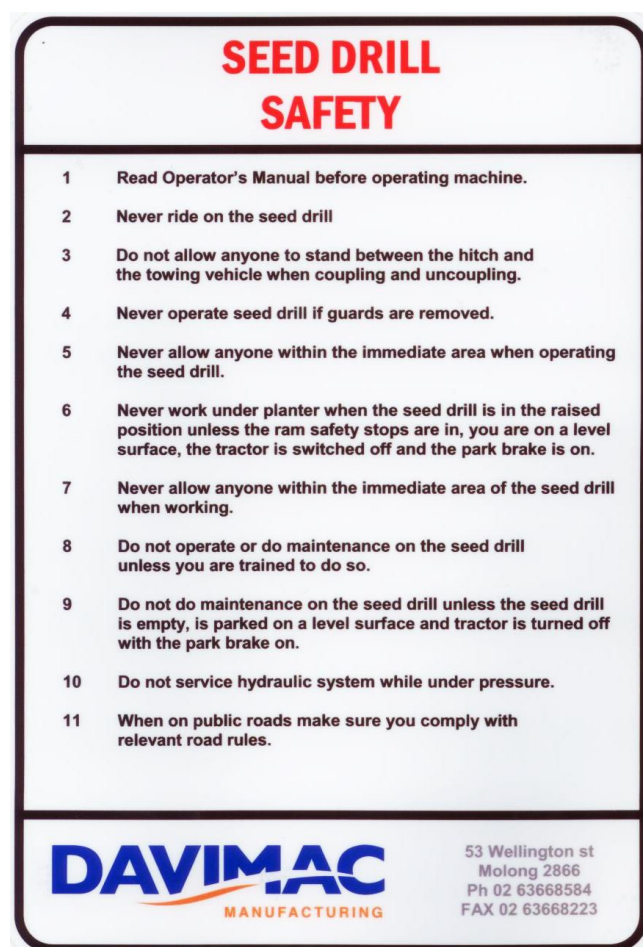
## Chemical

Agricultural chemicals can be dangerous. Improper use can seriously injure persons, animals, plants, soil and property.

- Read and follow chemical manufacturer's instructions.
- Always wear protective clothing.
- Handle all chemicals with care.
- Store or dispose of unused chemicals as specified by chemical manufacturer.

## Safety Decals

- Read all instructions noted on the decals.
- Keep decals clean.
- Replace damaged, faded and illegible decals.





## High Pressure Fluids



Warning - High Pressure Fluid Hazard: Escaping fluid under pressure can have sufficient pressure to penetrate the skin. Check all hydraulic lines and fittings before applying pressure. Fluid escaping from a very small hole can be almost invisible. Use paper or cardboard, and wear heavy gloves to check for suspected leaks. If an accident occurs seek immediate medical assistance.

- Avoid the hazard by relieving pressure before disconnecting hydraulic lines.
- Use a piece of paper or cardboard to check for suspected leaks.
- Wear protective gloves and safety glasses or goggles, and other appropriate safety equipment when working with hydraulic systems.
- If an accident occurs seek medical assistance immediately.

## Tyre Safety



Tyre changing can be dangerous and should be performed by trained personnel using correct tools and equipment.

- When inflating tyres, use a clip-on nozzle with an extension hose long enough for you to stand to one side of tyre assembly.
- Never walk away while a tyre is inflating. Stay and ensure the tyre is not over inflated.
- When removing and installing wheels, use wheel-handling equipment adequate for weight involved.

## Safe Maintenance

- Understand procedure before doing work. Use proper tools and equipment. Refer to this manual for additional information.
- Always use and wear appropriate personnel safety equipment.
- Work in a clean, dry area.
- Lower the drill, put the tractor in park, turn off engine, and remove key before performing maintenance.
- Make sure all moving parts have stopped and all system pressure is relieved.
- Remove build-up of grease, oil or debris.
- Ensure removal of all tools and unused parts from drill before operation.

## Safety Stops



Warning - Crushing Hazard: You may be severely injured or worse by being crushed under the falling implement. Always have transport locks in place and frame sufficiently blocked up when working on or under implement.

The safety stops are included in the toolbox. They are installed by raising the machine and placing stop over the rod and then inserting safety bolts on both cylinders (eg each side).



## SETUP

### Tractor Requirements

Check that tractor compatibility and power are sufficient for the seed drill and that it has one remote hydraulic outlet at 2300psi. If the unit has the option of coulters an additional outlet is required also at 2300psi.

If sowing at depths of 75mm (3") you will require 3-4 hp (2.2-3 kW) per tyne.

If sowing at depths of 75-125mm (3-5") you will require 5-6 hp (3.7-4.5 kW) per tyne.

Depending on your ground conditions you may require more or less power.

Note the seed drill loaded weights for each model are listed in the specifications section of this document.

### Hitching Tractor to Drill



*Warning – Crushing Hazard: When hooking planter to the towing vehicle the operator has the responsibility of safety for other persons in the area. Persons should not stand in between tractor and planter. Stop tractor engine and set park brake before installing the hitch pin.*

1. Make sure the tractor and seed drill are on level ground.
2. With drill tongue level, adjust drill hitch on drill tongue to match your tractor-drawbar height.
3. When drill hitch matches tractor-drawbar height, hitch drill to tractor. Insert draw bar pin and secure with safety pin.
4. Securely attach drill safety chain to an anchor on tractor capable of pulling drill.
5. Connect hydraulic hose(s).



*Warning - High Pressure Fluid Hazard: Escaping fluid under pressure can have sufficient pressure to penetrate the skin. Check all hydraulic lines and fittings before applying pressure. Fluid escaping from a very small hole can be almost invisible. Use paper or cardboard, and wear heavy gloves to check for suspected leaks. If an accident occurs, seek immediate medical assistance.*

6. Raise jack.

### Rephasing Cylinders

The lift cylinders may, after a period of time, get out of time or phase. The effects of this can be seen when one side of the drill is running too low or too high because its lift cylinder is either over extended or not retracted compared to the other lift cylinder.

To rephase the cylinders, raise drill completely and hold tractor hydraulic lever on for a few seconds to give cylinders time to rephase.

Note: Understand that having cylinders become gradually out of time is different than having air trapped in the system from improper bleeding. Each condition is corrected differently.



Caution: When towing check safety chain is attached.

Caution: When towing on public roads check that you comply with all road rules.

Caution: When towing do not exceed 25km/h.

## Transporting

1. Raise the drill into the transport position and hold at the full extent of the rams for 5-10 seconds to allow cylinders to rephase and equalise.
2. **Important** - To avoid machine damage due to drill lowering during transport, always insert ram safety stops.
3. Locate jack stand in transport position.
4. Maximum towing speed 25 km/h.
5. Ensure towing vehicle requirements are adequate for the seed drill load e.g. mass / brakes etc. (Refer specification section of this document for seed drill weights).
6. Braking when towing can cause the load to jack knife. Use extra care when towing in adverse conditions such as mud, inclines and sharp bends.
7. Lower towing speeds are recommended on farm roads/tracks and where one wheel is on or over a road verge.
8. Attach safety chains to tractor.
9. **Important** - Before commencing towing on the road check that you comply with all local road rules.

## Pre Start Checklist

1. Check wheel nuts are tight.
2. Check tyre pressure is as specified within this manual.
3. Check for oil leaks.
4. Check that no foreign objects are in the seed drill.
5. Check the frame for cracks or damage.
6. Ensure all guards are in place and in good working condition.

## Acre meter setup

Refer to the separate operation manual for specific details on installation, calibration, operation and servicing of the acre meter device. You will need the pulse distance and the sowing width.

### TD ACRE METER SETUP

ROW SPACING	NUMBER OF ROWS	PULSE DISTANCE	SOWING WIDTH
175	24	2,880	4200
175	28	2,880	4900
225	20	2,226	4500
250	16	1,963	4000
250	20	1,963	5000

### SD ACRE METER SETUP

ROW SPACING	NUMBER OF ROWS	PULSE DISTANCE	SOWING WIDTH
150	22	3,328	3300
175	22	2,815	3850
250	16	1,977	4000

### DF ACRE METER SETUP

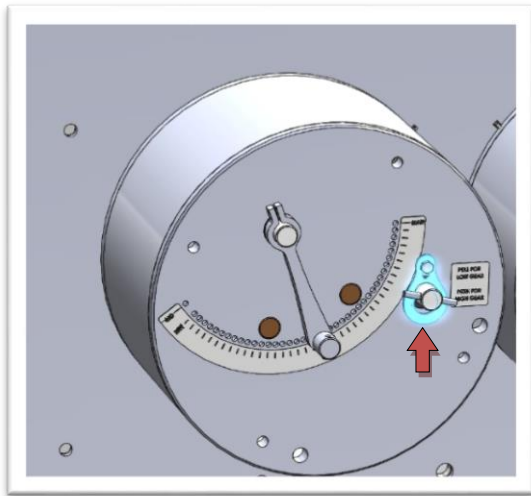
ROW SPACING	NUMBER OF ROWS	PULSE DISTANCE	SOWING WIDTH
125	24	1,219	3000
125	28	1,219	3500
150	20	1,219	3000
150	24	1,219	3600

### ED ACRE METER SETUP

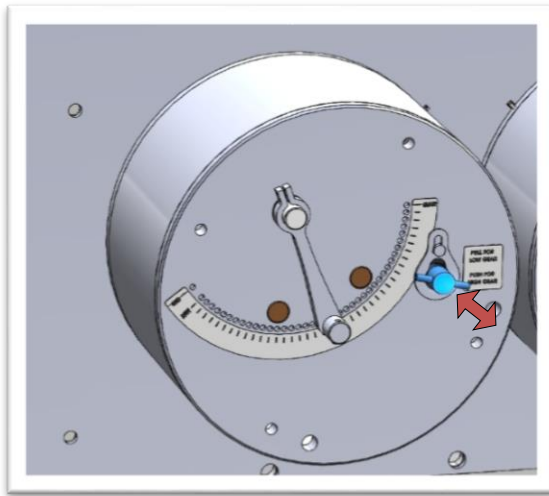
ROW SPACING	NUMBER OF ROWS	PULSE DISTANCE	SOWING WIDTH
150	16	1,219	2400
150	20	1,219	3000

## FLOW RATE ADJUSTMENT

### Adjusting the Seed Box Gear – High or Low



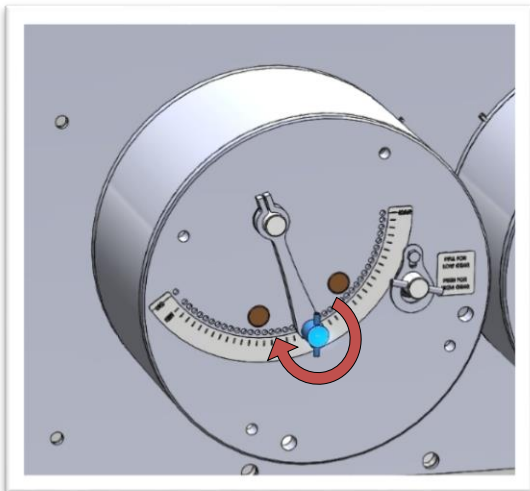
Hold the gear lock up



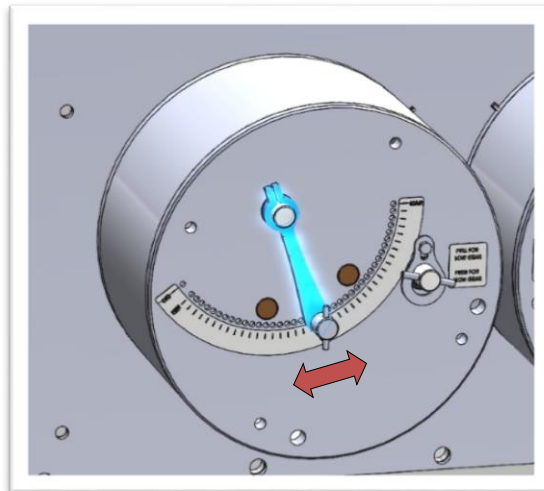
Pull or Push the gear shaft in or out  
**DO NOT FORCE**

- Notice there is a neutral gear in between High and Low
- **Wriggle gently into gear**, do not force.

### Adjusting the Calibration Lever – Settings 1 through 40



Unwind adjustment lock



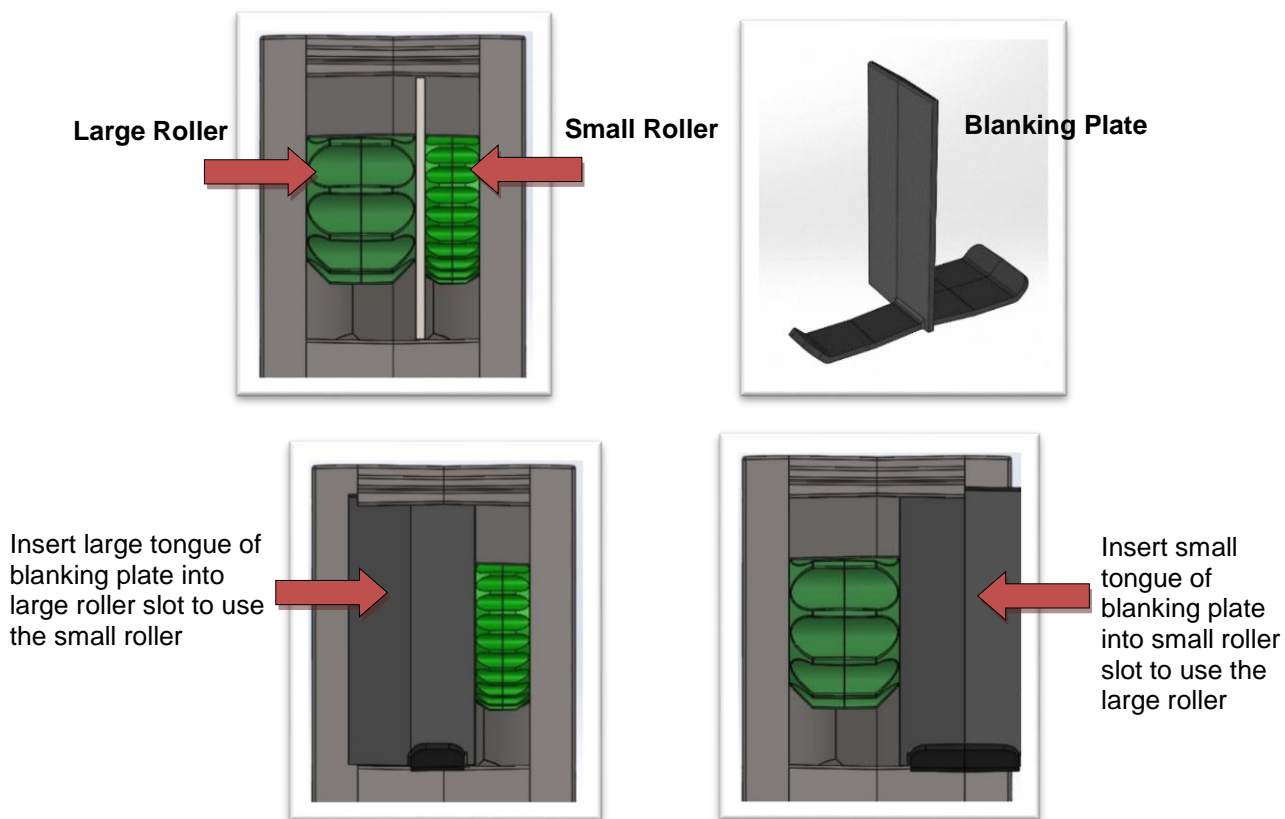
Slide to correct feed rate

Retighten the adjustment lock into the correct allocation.



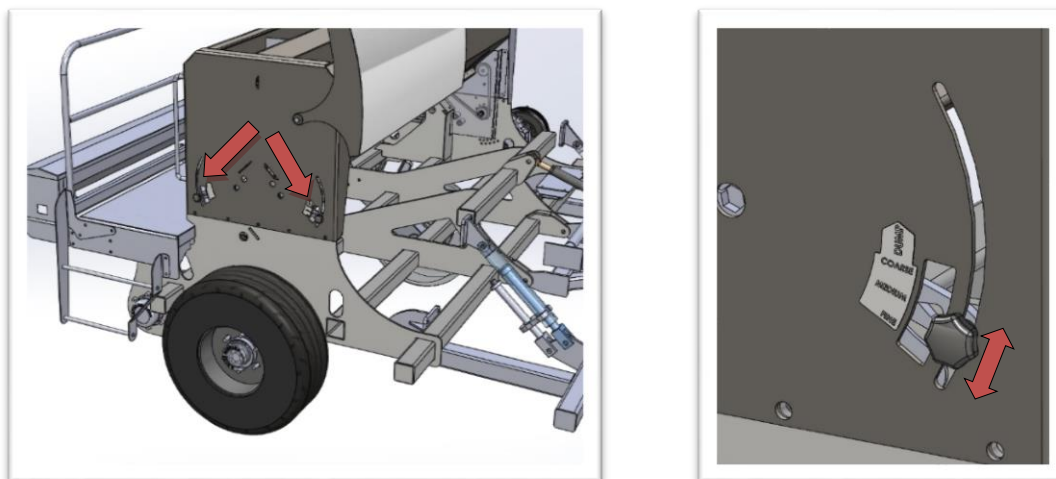
## Insert Blanking plates to select roller - Large or Small

Looking into the Seed/Fert boxes at the feed rollers, notice the different rollers  
Rollers highlighted here in **green** for clarity



## Adjust feed rate through Gates – Fine through Coarse

On the opposite end of the seed box from the gearbox, the gate adjustment lever controls the amount of seed which can flow through the seed rollers.



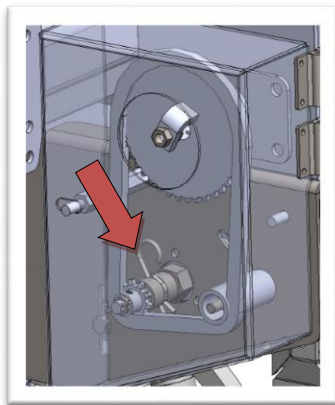
- Loosen the lever by unscrewing the knob which secures it
- Adjust to the desired feed rate
- Tighten the lever knob to secure in position

## SMALL SEED BOX

### Engage and Disengage Clutch

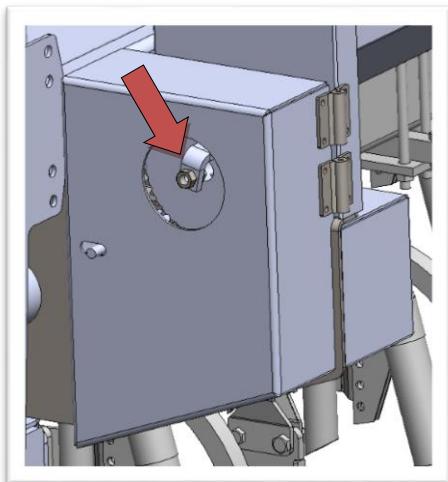
Removing the pin to disengage the clutch.

Replacing the pin to engage the clutch

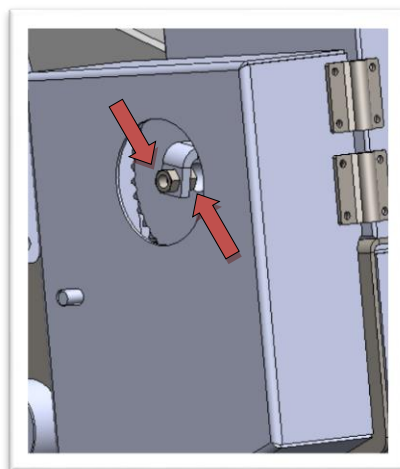


### Adjusting the Small Seed Box Choke

By moving the small seed box drive bar across, the choke in each feed roller will open or close. Loosen and tighten the two nuts on the drive bar to shift the bar across.

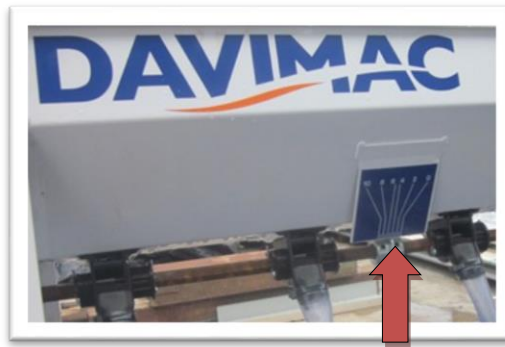


Small Seed Box Choke Adjustment



Two nuts which adjust choke

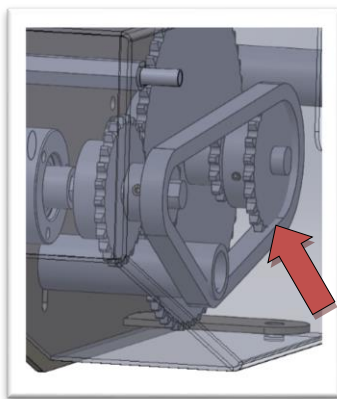
Loosen the nuts at the end of the drive shaft and then move the shaft so the washer aligns with the required setting.



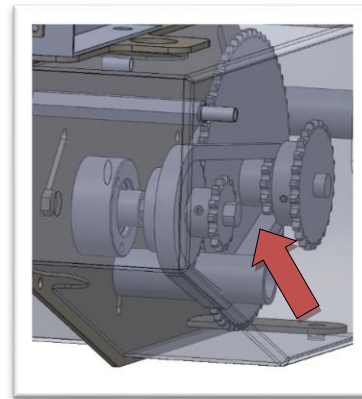
Washer to scale alignment

### Adjusting the Small Seed Box Speed.

If you are unable to get the seeding rate high or low enough you are able to change the sprockets in the gear box. It is recommended that the feedrollers be closed no more than 3/4.



**High gear**



**Low gear**

### CALIBRATION

We have supplied calibration charts but these are only a guide as grain and fertilizer size and weight can vary.

*Handy Hint – To calibrate the front seed box and the rear box at the same time place the seed at one end then the fertiliser at the opposite end to prevent cross contamination.*

## ED/DF Calibration Chart

Main Seed Box - Handle Turns & Factor for Kg/Ha

Rows	Row Spacing	Sowing Width	Turns of Handle per 1/40th of a Ha	Number to multiply grams by from 4 rows to give Kg/Ha
<b>16</b>	150	2.4m	87	0.16
<b>20</b>	150	3.0m	70	0.2
<b>24</b>	125	3.0m	70	0.24
<b>24</b>	150	3.6m	60	0.24
<b>28</b>	125	3.5m	60	0.28

## SD Calibration Chart

Main Seed Box - Handle Turns & Factor for Kg/Ha

Rows	Row Spacing	Sowing Width	Turns of Wheel per 1/40th of a Ha	Number to multiply grams by from 4 rows to give Kg/Ha
<b>16</b>	250	4.0m	16	0.16
<b>22</b>	150	3.3m	19	0.22
<b>22</b>	175	3.85m	16	0.22

## TD Calibration Chart

Main Seed Box - Handle Turns & Factor for Kg/Ha

Rows	Row Spacing	Sowing Width	Turns of Wheel per 1/40th of a Ha	Number to multiply grams by from 4 rows to give Kg/Ha
16	250	4.0m	13	0.16
20	175	3.5m	15	0.2
20	250	5.0m	11	0.2
24	175	4.2m	13	0.24
28	175	4.9m	11	0.28

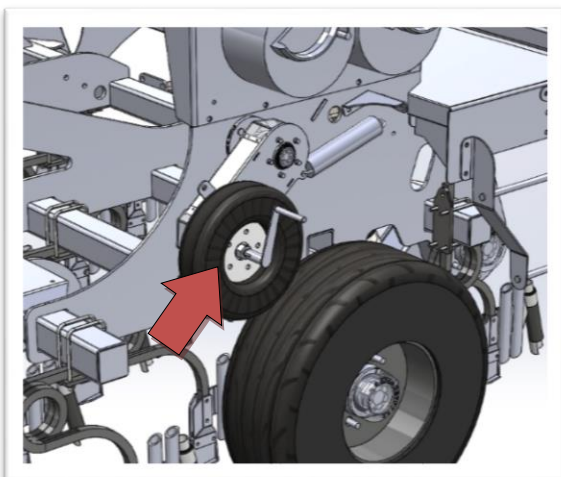


## Main Box Calibration

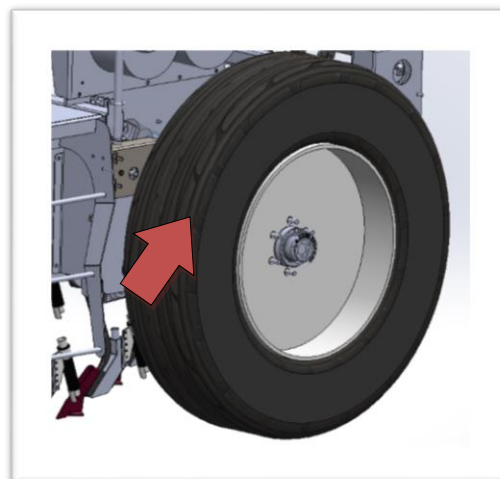
- Ensure you have accurate weighing scales.
  - Set up containers under relevant down tubes
1. Check the calibration charts and set the following features accordingly:
    - a. Insert Blanking plates to use correct feed roller – Large or Small
    - b. Set the Gearbox to the recommended gear - High or Low
    - c. Adjust the Gate lever as recommended – Fine through Coarse
    - d. Set the Calibration lever to the recommended location - 1 through 40

For further information, flick back over the previous pages

2. Cover 4 rows in the seed box (front box) with enough grain to cover the feed rollers
3. At the opposite end, cover 4 rows in the fertiliser box (back box) with enough fertiliser to cover the feed rollers
4. Place containers under the down tubes that have the grain or fertiliser covering them
5. Turn the idler wheel or drive axle for ED and DF using the calibration handle in a clock wise direction the number of turns as listed for your model in the previous table.  
Turn the drive wheel for SD and TD in a clock wise direction the number of turns as listed for your model in the previous table



Calibration handle fitted to Idler wheel for DF and ED machines



Drive wheel for TD and SD machines

6. Weigh the grain in grams and multiply that amount by the number listed in the below table for you model. This gives you the rate as kg/Ha.
7. If calibration is wrong adjust the calibration lever and redo steps 4 to 7.

[illegible]

Main Box Fertilizer Charts		Varibox Lever Setting							
		1	5	10	15	20	25	30	35

Main Box Fertilizer Charts		Varibox Lever Setting							
		1	5	10	15	20	25	30	35

	1	5	10	15	20	25	30	35	40
--	---	---	----	----	----	----	----	----	----

	1	5	10	15	20	25	30	35	40
--	---	---	----	----	----	----	----	----	----

	1	5	10	15	20	25	30	35	40
--	---	---	----	----	----	----	----	----	----

	1	5	10	15	20	25	30	35	40
--	---	---	----	----	----	----	----	----	----

	1	5	10	15	20	25	30	35	40
--	---	---	----	----	----	----	----	----	----

	1	5	10	15	20	25	30	35	40
--	---	---	----	----	----	----	----	----	----

	1	5	10	15	20	25	30	35	40
--	---	---	----	----	----	----	----	----	----

	1	5	10	15	20	25	30	35	40
--	---	---	----	----	----	----	----	----	----

	1	5	10	15	20	25	30	35	40
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	Feed Roller	Gate setting	Gear setting	Kg per Hectare
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[illegible]

## Small Seed Box Calibration (if fitted)



Caution: Only put small seeds in this box. (Wheat and oat are too large). Large seeds will be damaged and will cause premature wear of your machine.

- Ensure you have accurate weighing scales.
- Set up containers under relevant down tubes.

To calibrate:

1. Check the calibration charts and set the following features accordingly:
  - a. Set the Calibration lever to the recommended location - 1 through 18
  - b. Adjust the choke by shifting the drive bar – Fine through Coarse.

For further information, flick back over the previous pages.

2. Cover 4 the rows in the seed box with enough grain to cover the feed rollers.
3. Place containers under the tubes.
4. Turn the idler wheel or drive axle in a clock wise direction the number of turns as listed for your model in the table which can be found in the main seed box calibration section.
5. Weigh the grain in grams and multiply that amount by the number listed in the same table as the previous step for your model. This gives you the rate as kg/Ha.
6. If calibration is wrong adjust the Small Seed Box Choke.

### SMALL SEED CALIBRATION CHART

LOW GEAR					
Seed Box Settings	2	4	6	8	9
Red Clover	1.6	3.5	5.5	7.5	8.5
Lucerne	1.3	3	4.5	6.5	8
Sub Clover	1.2	2.8	4.5	6	7
Canola	1	2.2	3.7	5	6
Phalaris	1	2.5	3.7	5	5.7
Ryegrass	0.6	1.2	2	2.7	3

HIGH GEAR					
Seed Box Settings	2	4	6	8	9
Red Clover	6.5	13.5	21	27.5	31.5
Lucerne	5	11	18	24	30
Sub Clover	4.5	10.5	17	23.5	27
Canola	3.5	8.5	13.5	19	23
Phalaris	3.8	9.6	14.5	19	21.5
Ryegrass	2.2	4.7	7.5	10	11.5



## FIELD OPERATION



Warning: Ensure that the paddock is clear of obstacles that may damage, or cause damage to, the seed drill or operator.

*If using the small seed box (where fitted) ensure the clutch is engaged!*

### Leveling the Drill

1. Use hitch turnbuckle to level drill.
2. Lower unit to take weight off of drill. Do not adjust with unit in raised position.
3. Loosen jam nuts on hitch turnbuckle.
4. Turn turnbuckle to shorten or lengthen until top of drill frame is parallel to the ground being careful not to extend clevises beyond turnbuckle.
5. Retighten jam nuts on turnbuckle.



### Sowing Speed

Typical travel speeds when sowing range from 6-12 km/h in good conditions. In stony and uneven ground conditions a lower speed is recommended to minimise rapid part deterioration.

Sowing too fast can result in:

1. Poor contour following and uneven sowing depth.
2. Impact damage to:
  - a. Ground engaging components.
  - b. Bearings, housings & axles.
  - c. Fasteners & structural components.
3. More extreme conditions will result in greater vibration & uneven seed flow at low seeding rates.

### Sowing Depth

For machines with serial numbers starting with TD, DF or SD adjust the sowing depth by placing depth stop collars on the **drive side hydraulic only**.

For seed drills with model numbers starting with ED adjust the sowing depth by placing depth stop collars on the hydraulics **on both sides**.



Caution: For the TD, SD and DF units only fit depth stop collars to drive side.

Caution: For the ED units depth stop collars must be fitted to both sides.

## Disc Coulters (if fitted)

Disc coulters are designed to cut the trash in front of each tyne to let you sow into heavier trash.

The disc coulters should be lifted up or removed if they are not required to save on maintenance

*Caution: Do not turn with disc coulters in the ground as they will drag sideways causing damage and premature wear!*

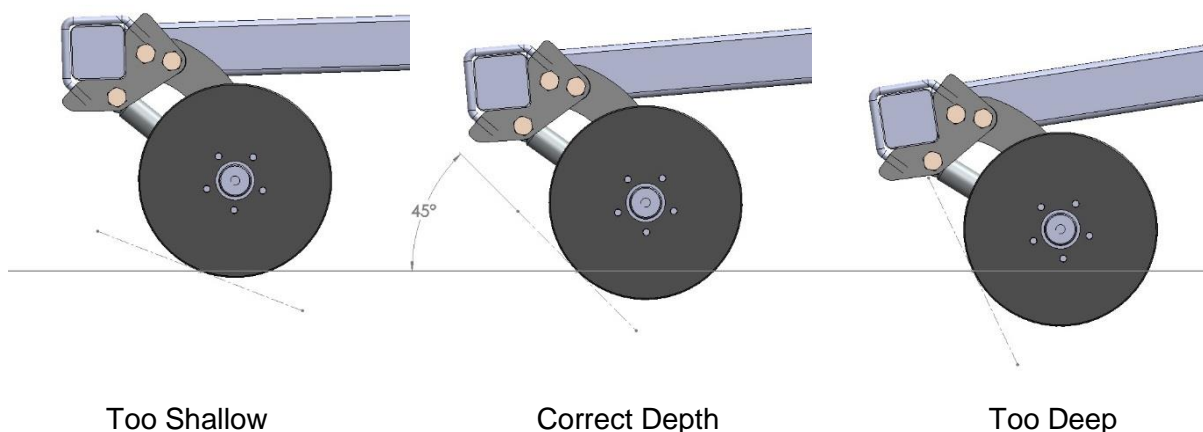


### Adjustment

The disc coulters need to be set at the correct depth so that they work successfully

- Too shallow and the discs will roll over the trash
- Too deep and the trash will build up in front of the discs
- If the soil is dry the discs will have trouble penetrating the soil.

As a general guide, the wheel depth should be such, that the angle of penetrate should be approx. 45° to ground level.



Too Shallow

Correct Depth

Too Deep

## MAINTENANCE AND LUBRICATION

### Maintenance

Proper servicing and maintenance is the key to long implement life. With careful and systematic inspection, you can avoid costly maintenance, downtime and repair. Always turn off and remove the tractor key before making any adjustments or performing any maintenance.



*Warning - Crushing Hazard: You may be severely injured or worse by being crushed under the falling implement. Always have transport locks in place and frame sufficiently blocked up when working on or under implement.*



*Warning - High Pressure Fluid Hazard: Escaping fluid under pressure can have sufficient pressure to penetrate the skin. Check all hydraulic lines and fittings before applying pressure. Fluid escaping from a very small hole can be almost invisible. If an accident occurs, seek immediate medical assistance from a physician familiar with this type of injury.*

1. After using the drill for several hours, check all bolts to be sure they are tight.
2. Lubricate areas listed under “Lubrication”.
3. Adjust idlers to remove excess slack from chains. Clean and use chain lube on roller chains as required.
4. Check tyre inflation as specified in “Tyre Inflation Chart”.
5. Clean out seed from feed cups.
6. Replace any worn, damaged or illegible safety decals.

### Safety Stops

The safety stops are included in the toolbox. They are installed by raising the machine and placing stop over the rod and then inserting safety bolts on both cylinders (eg each side).

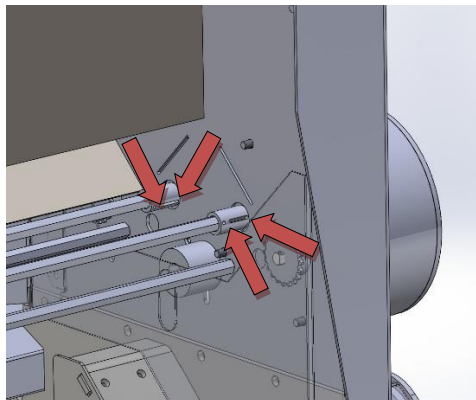
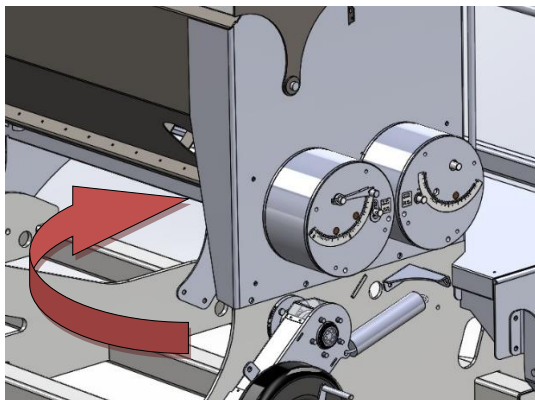


## Drive Shear Pins



Caution: This seed drill is fitted with a shear pin on both the gearboxes where they connect to the hex drive bar. If it is sheared replace with approved pin only!!

Looking behind the gearboxes, there is a sliding collar where the drive bar of the gearbox connects to the hex bar for the seed rollers. (x2) shear pins secure this connection.



If these pins shear off, thoroughly investigate the cause. Only replace with approved shear pins.

## Lubrication

Area	Weekly	Pre-Season
Oil/Grease all chains	✓	
Grease Coulter Pivots	✓	
Check Gearbox Oil		✓

## Bolts and Hardware

Check wheel nuts every day for the first 3 days and weekly after that. Note: Davimac Pty Ltd does not warrant faults relating to wheel nut tightness. It is the responsibility of the operator to check and maintain wheel nut torque on a regular basis.

Check all bolts and hardware after the first 50 hours of use. All fasteners should be checked and retightened as required during an annual service.



Caution: Use only metric tools on metric bolts to avoid damage to bolt heads and to prevent tools slipping and causing injury.

## Torque Chart

Bolt Dia	Class 4.6		Class 8.8		Class 10.9	
	Nm	ft-lbs	Nm	ft-lbs	Nm	ft-lbs
8	8	6	22	16	32	24
10	17	13	44	32	63	46
12	30	22	77	57	109	80
14	51	38	133	98	189	139
16	73	54	190	140	270	199
18	108	80	281	207	399	294
20	143	105	372	274	528	389
24	248	183	640	472	914	674
30	491	362	1314	969	1817	1340

Bolts should only be replaced with higher grade bolts. If replaced by a higher grade bolt then the original bolt torque should be applied.

## Tyre Inflation Chart

Tyre Size	psi	kPa
235/75 - 15	20	138
11.5/80 15.3	40	276
380/85 R24	20	138
380/85 R34	20	138



Caution: Tyre pressure should be checked weekly

## Disc Coulter Maintenance

Proper servicing and maintenance is the key to long implement life. With careful and systematic inspection, you can avoid costly maintenance, downtime and repair.

Always turn off and remove the tractor key before making any adjustments or performing any maintenance.

- The bearing should be checked each time the discs are changed and replaced if necessary
- The pivot and hinge bush should be checked each time the discs are changed

## Storage



*Warning – Make sure the seed drill is stored on level ground, with the key removed from the tractor and all drives disengaged.*

The seed drill should be stored under cover when not in use for longer life.

1. Unload seed and fertilizer boxes.
2. Thoroughly clean seed, fertilizer and seed-treatment residue from boxes and feed cups.
3. Remove any dirt and debris that can hold moisture and cause corrosion.
4. Lubricate and adjust all roller chains.
5. Inspect drill for worn or damaged parts. Make repairs and service during the off season.
6. Use spray paint to cover scratches, chips and worn areas on the drill to protect the metal.
7. Cover with a tarp if stored outside.
8. Spray a light spray of diesel or a rust preventative silicone spray on the inside of the boxes to prevent corrosion.

## SPECIFICATIONS AND CAPACITIES

### Davimac DF Drill

Davimac DF Drill				
	20 Row 150mm spacing's	24 Row 125mm spacing's	24 Row 150mm spacing's	28 Row 125mm spacing's
Sowing Width	3000mm	3000mm	3600mm	3500mm
Overall Width	3130mm	3130mm	3680mm	3680mm
Overall Height (Tynes on the ground)	2080mm			
Box Capacity	Seed 500L Fertiliser 500L	Seed 500L Fertiliser 500L	Seed 615L Fertiliser 615L	Seed 615L Fertiliser 615L
Wheels	Heavy Duty Implement Tyres 11.5/80-15.3			
Number of Tool Bars	4 Tool Bars at 475mm Spacing's			
Power Requirement	3 to 4 hp (2.3 to 3 kW)			
Tynes	High Quality 25mm Coil Tynes			
Under Tyne Clearance	380mm from the tip of the point to the ground when lifted			
Under frame clearance	600mm when fitted with 25mm coil tynes			
Small Seed Box Capacity	90L	90L	112L	112L
Coulters (optional)	14" disc coulters, with triple lip seals in hubs			
Acre metre	The acre metre is a Farm Scan Monitor			
Weight Including Discs	1948kg	2064kg	2325kg	2457kg
Loaded Weight (Wheat)	2750kg	2865kg	3310kg	3440kg

### Davimac SD Drill

Davimac SD Drill			
	22 row 150mm spacing's	16 row 250mm spacing's	22 row 175mm spacing's
Sowing Width	3300	4000	3850mm
Overall Width	4200	4700	4700mm
Overall Height (Tynes on the ground)	2170mm with coil tynes 2270mm with spring release tynes		
Box Capacity	Seed 400L Fertiliser 400L	Seed 485L Fertiliser 485L	Seed 575L Fertiliser 575L
Wheels	380/85-R24		
Number of Tool Bars	3 bars at 575mm spacing's		
Power Requirement	4-5hp (3-4Kw) per tyne		
Tynes	High Quality 25mm spring coil tynes as standard Optional spring release tynes at 400 or 600 pound		
Under Tyne Clearance	285mm from the ground to tip of point (Coil tyne)		
Under frame clearance	600mm when fitted with 25mm coil tynes (700mm with spring release).		
Small Seed Box Capacity	90	110	130
Coulters (optional)	14" disc coulters individually sprang, with triple lip seals in hubs		
Acre metre	The acre metre is a Farm Scan Monitor		
Weight Including Discs	1575kg	1860kg	2105kg
Loaded Weight (Wheat)	2215kg	2636kg	3025kg

## Davimac TD Drill

Davimac TD Drill				
	16 Row 250mm spacing's	24 Row 175mm spacing's	20 Row 250mm spacing's	28 Row 175mm spacing's
Sowing Width	4000	4200	5500	4900
Overall Width	4770	5170	5765	5825
Overall Height (Tynes on the ground)	2350mm			
Box Capacity	Seed 650L Fertiliser 650L	Seed 785L Fertiliser 785L	Seed 715L Fertiliser 715L	Seed 920L Fertiliser 920L
Wheels	Heavy Duty Implement Tyres 380/85-R34			
Number of Tool Bars	4 bars			
Power Requirement	4-5hp (3-4Kw) per tyne. (if direct drilling deeper than 75mm allow 6-7hp)			
Tynes	400 pound spring release tynes Optional 600 pound spring release tynes			
Under Tyne Clearance	290			
Under frame clearance	700mm from tip of tyne to underside of the frame			
Small Seed Box Capacity	115L	145L	170L	170L
Coulters (optional)	14" or 16" disc coulters, with triple lip seals in hubs			
Acre metre	The acre metre is a Farm Scan Monitor			
Weight Including Discs	2740kg	4200kg	3080kg	3820kg
Loaded Weight (Wheat)	3780kg	5688kg	4336kg	5292kg

## Davimac ED Drill

Davimac ED Drill		
	16 row 150mm spacing's	20 row 150mm spacing's
Sowing Width	2400mm	3000mm
Overall Width	2875	3475
Overall Height (Tynes on the ground)	1840	
Box Capacity	Seed 315L Fert 300L	Seed 400L Fert 390L
Wheels	235/75 R15	
Number of Tool Bars	3 Tool bars at 450mm spacing's	
Power Requirement	3 to 4 hp (2.3 to 3 kW)	
Tynes	High Quality 25mm spring coil tynes as standard	
Under Tyne Clearance	260mm from the tip of the point to the ground when lifted	
Coulters (optional)	14" disc coulters with triple lip seals in hubs	
Acre metre	The acre metre is a Farm Scan Monitor	
Weight Including Discs	1220kg	1385kg



## TROUBLESHOOTING

Problem	Possible Cause	Possible Solution
Grain not flowing into the feed rollers	Grain is unclean or has rubbish or stubble.	Get grain cleaned.
	Grain is a non-flowing grain (eg Buffalo grass etc)	Either mix with a denser material or coat the seed.
Drive not turning over	Fertiliser has set.	Check shear pins.
Mud building up in feed tubes.	Sticky clay soils.	Use mud shields.

## SPARE PARTS

For spare parts refer to the separate spare parts manual which can be supplied through your dealer.

## HAZARD IDENTIFICATION & RISK ASSESSMENT

# DAVIMAC SEED DRILL RANGE

RISK ASSESSMENT	Rate the severity & likelihood of any potential or existing hazards present within the machine			
RISK SEVERITY	4=Possible fatality	3=Major injury	2=Minor injury	1=Negligible injury
LIKELIHOOD OF OCCURRENCE	4=Very likely	3=Likely	2=Unlikely	1=Very unlikely
FREQUENCY	If the exposure to a hazard is very frequent e.g.. Continuous, compared to daily, weekly, monthly etc. the exposure should be reflected in increased likelihood of occurrence			
Add the Risk Severity to the likelihood of Occurrence to calculate the Risk Assessment Rating				

HAZARD TYPE			CAUSE OF HAZARD	RISK ASSESS RATING	RISK CONTROL
REF	Is there potential for injury or illness due to...	Yes/No	If YES, what is the cause or source of hazard ...		Determine and apply appropriate risk controls after considering Hierarchy of risk control
H1	<b>ENTANGLEMENT</b> Entanglement, drawing in, pinching or trapping.	YES	Rotating shafts. Moving chains or belts.	3 + 3 = 6 3 + 3 = 6	Fit safety guards. Fit decal.
H2	<b>CRUSHING OR IMPACT</b> Crushing or impact during operation	YES	Raising or lowering Coulter Bars Working under raised machines	3 + 2 = 5	Fit decal. Fit safety stops when working under machine
H3	<b>STRIKING</b> An object striking the operator or another person.	YES	Material Discharge Spring loaded tynes	2 + 3 = 5	Fit decal.
H4	<b>CUTTING</b> A cutting, stabbing, puncturing or shearing injury.	YES	Sharp edges on structures & mechanisms	2 + 2 = 4	Remove sharp edges from any areas which may be inadvertently contacted during operation. Others guarding generally impractical without affecting function. Fit decal.
H5	<b>SLIPPING</b> Slipping, tripping or falling	YES	Steps, handrailings & work platforms. General condition where operator may stand on unit during service or adjustment.	2 + 2 = 4 1 + 1 = 2	Securely fitted with non-skid treads. 3 points of contact for access ensure no loose or hanging hoses or similar items that could cause a trip or fall.
H6	<b>EXPOSURE</b> Exposure to vibration, heat, radiation, friction or abrasion	NO		0	
H7	<b>NOISE</b> Excessive noise	YES	No other specific hazards		Ensure machine attached to a safe tractor.
H8	<b>FLUID</b> Hydraulic fluid penetration	YES	Coupling & uncoupling hydraulic quick release fittings.	3 + 1 = 4	Hydraulic system in good condition. Correct fitting & correct pressure rating for hoses. Fit decal.
H9	<b>HAZARDOUS SUBSTANCES</b> Hazardous or dangerous substances or suffocation.	NO		0	
H10	<b>MANUAL HANDLING</b> manual handling or ergonomic conditions causing physical injury.	YES	Incorrect use of controls (where applicable)	3 + 2 = 5	Ensure controls marked or decal fitted showing purpose of controls.
H11	<b>EXPLOSION</b> An explosion	YES	Over inflating of tyre.	3 + 1 = 4	Fit Decal.
H12	<b>ELECTROCUTION</b> Electrocution or electrical burning.	YES	Contact with low overhead electrical cables (e.g. folding sections or cultivators etc.)	4 + 2 = 6	Fit decal.

## Customer Hazard Identification and Risk Assessment

In the event of any activity taking place with the Seed Drill which has not been considered by Davimac Pty Ltd it is the customer's responsibility to perform their own hazard identification and risk assessment, and to implement reasonable control measures to avoid injury to any person. The following form is supplied to facilitate safety in such occasions.

# DAVIMAC SEED DRILL RANGE

RISK ASSESSMENT	Rate the severity & likelihood of any potential or existing hazards present within the machine.			
RISK SEVERITY	4=Possible fatality	3=Major injury	2=Minor injury	1=Negligible injury
LIKELIHOOD OF OCCURRENCE	4=Very likely	3=Likely	2=Unlikely	1=Very unlikely
FREQUENCY	If the exposure to a hazard is very frequent e.g.. Continuous, compared to daily, weekly, monthly etc. the exposure should be reflected in increased likelihood of occurrence			
Add the Risk Severity to the likelihood of Occurrence to calculate the Risk Assessment Rating				

HAZARD TYPE			CAUSE OF HAZARD		RISK CONTROL
REF	Is there potential for injury or illness due to...	Yes/No	If YES, what is the cause or source of hazard ...	RISK ASSESS RATING	Determine and apply appropriate risk controls after considering Hierarchy of risk control
H1					
H2					
H3					
H4					
H5					
H6					
H7					
H8					
H9					
H10					
H11					
H12					
H13					

## Warranty Registration Form and Safety Check List

This form must be completed with a Davimac representative and returned to Davimac to validate your warranty.

Customer Name	
Serial Number	
Address	

A Davimac representative is to go through the following points with the customer. The customer must initial each item as confirmation that they fully understand each point.

- Write the Model number and Serial number on the front of the customer's manual
- Run through with the customer the warranty section in the manual (Page 6) \_\_\_\_\_
- Go through all the safety information on pages 7-9 in the manual with the customer and pointing out these issues on their Seed Drill \_\_\_\_\_
- Show the customer the Tractor Requirements (Page 10) and the loaded weight of their Seed Drill (Page 26-27). The tractor that is to tow the Seed Drill must be rated to tow the seed drill when fully loaded. (failure to do so could result in series injury or death) \_\_\_\_\_
- Show the customer the Hitching Tractor to Seed Drill section in the manual (Page10) and ensure they understand \_\_\_\_\_
- Show the customer the Transporting Section in the manual (Page11) and ensure they understand \_\_\_\_\_
- Show the customer the Pre Start Checklist (Page11) and ensure they understand \_\_\_\_\_
- Show the customer the Field Operation (Page20-21) and ensure they understand \_\_\_\_\_
- Show the customer the Flow Rate and Calibration (Page12-14) and ensure they understand \_\_\_\_\_
- Show the customer the Maintenance and Lubrication (Page22-25) and ensure they understand \_\_\_\_\_

I have been shown and fully understand the safety and operating procedures required for the correct use of the Davimac Seed Drill		
Customer name	Signature	Date
Approved representative	Signature	

**Thank you on behalf of Davimac for purchasing a Davimac Seed Drill**