



OWNERS MANUAL

Air Seeder

AS300, AS340 & AS360 Series



Manufactured by:

Dealer / Local Agent

Taege Engineering Ltd
Main West Road,
Sheffield 7500
New Zealand
Ph: 64 3 318 3824
Fax: 64 3 318 3646
E-mail: sales@Taege.com
www.Taege.com



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Introduction

Congratulations on purchasing a Taege Air Seeder! Taege Engineering, a market leading agricultural company, who pride themselves on developing market leading solutions demanded by New Zealand farmers and contractors.

Taege Engineering want you to be satisfied with your drill, which has been designed and manufactured to provide years of dependable use.

By following our owner's manual (using, service, maintenance etc) the life span and the second-hand value of the machine can be extended. If you ever lend or sell this machine, make sure that the borrower or buyer gets the operator's manual, so they will also know how to properly maintain and use it. You can download additional copies of your owner's manual from www.dealer.Taege.com.

The serial/chassis number of your machine are stamped and/or plated on the front right hand side of the air seeder, on the main chassis cross member.

Reference to the right and left hand side of the air seeder is as you see it from behind the air seeder looking toward the tractor.

Please quote your air seeder model, chassis number and controller version when seeking advice or ordering parts.

E.g. series AS300 S/No 535 36 11. RC300L ver 2.52d

Thank you for purchasing a Taege Air Seeder. Taege Engineering has a policy of continuous product development and therefore reserves the right to modify the design and appearance of products without prior notice.

Safety

- Focus on being prepared for emergencies.
- Read the operators manual carefully.
- Always follow recommended safe practices for operating this air seeder and its associated equipment, including tractors and other machinery used in conjunction with this Air Seeder.
- Identify and avoid un-safe terrain.
- Always use lynch pins and safety chains on all drawbar pins.
- Do not exceed 30km/hr while towing the air seeder in normal working position.
- Keep all covers in place at all time unless removed for repairs or servicing.
- Stop the Air Seeder before making any adjustments.
- Lower Air Seeder to ground or put on stands when working around or under the machine.
- Ensure tractor electrics are disconnected and/or turned off and machine hydraulics disconnected when working on Air Seeder.
- Tighten all nuts and bolts after initial use and thereafter at regular 30hr intervals.
- Tractor hydraulics should not be operated in the float position to ensure full air seeder penetration and proper contour following.
- Put the safety lockout stays (spacers) on the wheel rams so they are locked in the fully extended position while transporting.
- Watch for moving parts and stay well clear of Air Seeder while it is moving.
- Practice safe handling of agricultural chemicals including treated seed.
- Double safety chains should be used to secure Air Seeder both on end tow, and behind the tractor.
- End-tow units with mudguards and lights for road use are available as an optional extra. (see Removing the end tow kit)
- Wear appropriate safety equipment while operating the air seeder and including when filling seed / fertilizer hoppers and/or adjusting Air Seeder. This includes safety glasses, gloves, ear protection, close fitting clothing and steel capped boots.
- Visit www.osh.dol.govt.nz for additional guidance and instruction on safe practices in the rural sector and/or other sectors targeted for the intended use of this Air Seeder.

SAFE OPERATING PROCEDURES

- Before operating the Taege Air Seeder please read the following 'Safe Operating Procedures'.
- Failure to comply with these warnings could result in serious injury.
- A careful and alert operator is the best insurance against incidents.
- Taege Air Seeders are designed to be safe to operate.
- Do not wear loose clothing, unrestrained long hair, jewellery or anything which could entangle in components or limit your vision.
- Never work or walk or allow any person/child under the equipment.
- If travelling on the road please ensure that the tractor being used is fitted with the necessary lights, turn signals and all other legally required equipment.
- No person is ever to be between the tractor and this implement.
- No person/child is to climb or ride onto this implement at any time other than the operator.
- When parking or before working on the machine. Stop the tractor on a firm level surface and apply the parking brake. Lower the machine to the ground and switch off the engine. Remove the key for added safety.
- The machine should not to be used unless the operator has been trained in its safe use.
- **Before working under the machine, fit all delimiter blocks to prevent the hydraulic rams from closing in the event of a hydraulic hose failure**
- **Before working under the machine, always pin the frame stand down on machines that are uncoupled from the tractor**

MAINTENANCE

Daily

- Grease all grease points (see Lubrication)

Weekly

- Check the tyne nuts and wheel nuts are tight
- Check hitch points for wear. Replace when necessary.
- Replace tynes if bent only by those recommended by the manufacturer.

STORAGE

- Store in shed away from vehicle or pedestrian traffic.
- Ensure machine is empty to eliminate rodent damage to rollers as this is not covered by warranty.

Getting the Air Seeder ready the first time

- Attach the tractor to the air seeder drawbar using the tractor lower linkage arms.
- Connect the hydraulic hoses and plug in the air seeder power lead to the tractor 30amp auxiliary power supply.
- Ensure that the hydraulic hoses and wiring loom are clear of the tractor linkage and drawbar.
- Stow the Jack stand in the transport position.
- Please tighten the wheel stud nuts.
- You now ready to put seed/fertilizer into the hopper/s.
- Release the securing hook on the hopper cover and roll the cover to the open position, after filling the hopper, reverse this procedure.

Calibration

Calibration is the method by which you put the correct amount of seed/fertilizer on an area of seed bed. The Controller has been programmed to know the sowing width of the Air Seeder, the distance travelled, and can speed up or slow down per the ground speed.

To accurately measure by weight of the seed that is to be sown is done by reading and following the instructions on page 4 of the **Controller Manual**. It is important that this is accurate, and the weighing scales which are provided are used. These scales measure in 1 gram increments.

Care needs to be taken to prime the hopper before being calibrated, ensuring no bridging occurs. When calibrating an Air Seeder ensure that sufficient seed is weighed.

E.g: Small seeds at least 1.00Kg

Cereals 2 Kg

Fertilizer 2 -3Kg

Calibration

Go to the RC300L Controller ver2.5x Operators manual and follow the instructions
Page 4 QUICK CALIBRATION

Always disconnect the controller when not in use.

Always disconnect the power source, the controller and cables to the motor when welding on the machine.

Travelling Speed

Taege Air Seeders average recommended speeds are from 8Kph to 12Kph.

Ground conditions play an important part in achieving this optimum speed. It is important to inspect your seed placement when determining optimum drilling speed and air speed when inspecting seed placement and seed bounce.

Setting the Sowing Depth

Your Taege Air Seeder is fitted with HD Flexible "S" tynes which contact the ground at a specific preset angle which gives greater contour following and ground penetration. Check the sowing depth. We recommended that you travel at your optimum drilling speed and make sure that the seed placement is correct.

Set the depth, by changing the ram collars on the hydraulic rams. Making sure that the same number and sized collars are fitted to each hydraulic ram shaft.

Each collar size combination gives you increments of 4mm adjustment.

Adjust the level of the air seeder, using the height of the lower linkage arms of the tractor and by adjusting the wing ram pins at the top of the wing rams in soft ground conditions.

Setting the Fan Speed

Your Taege Air Seeder is fitted with a hydraulically driven fan with cooling and “rpm” sensor. Adjust the fan speed to suit the seed type being used by adjusting the flow control on the tractor hydraulic control. Optimum fan speed is variable so check and make sure that seed placement is correct. The fan speed is set between 2800rpm & 2900rpm at the factory.

Air Seeder Operation

Once you have set the correct depth, mount the tractor and start drilling by turning the RC300L Controller to **RUN**. You will see a moving indicator on the top right hand of the controller display which indicates engaged operation.

When you lift the air seeder at the end of a drilling run, the air seeder will automatically stop sowing seed and the indicator will stop moving, then start again when the air seeder is lowered. Check the air speed “RPM” for any variation in speed this shows in both “RUN/STOPPED” mode.

Further information is available on the screen by pressing the OK button in the **RUN** mode.

Emptying the Hopper

To empty the hopper, pull the blanking plate that is situated above the metering sponges to the closed position, remove the metering cassette, place a receptacle under the hopper outlet, put the chute in position and push the slide to the open position. The hopper will now gravity empty.

Removing Metering Cassette Assemblies

Release the clamps on either side of the metering cassette after pulling the blanking plate into position closed position, then remove the cassette. Reverse the procedure to re-assemble.

When refitting the cassette assembly unit you may need to re-aligned the driver dogs inside the cassette assembly.

Bolted Connections

All bolts should be checked for tightness and re-tightened after the first day or 50Ha of use. Thereafter the tyne and tip bolts should be checked at regular intervals (i.e. daily or every 100 to 400 ha). Nyloc nuts should be replaced or a spring washer added if the nyloc nuts have been removed more than once.

Adjusting the air turbine (fan) using the tractor flow control

The air turbine (fan) is hydraulically driven with pressure protection for the oil cooler. The turbine (fan) should be set between 2800rpm & 2900rpm. Turbine (fan) "RPM" is indicated on the rate controller (RC300L). Flow rate should be adjusted using the tractors flow control.

Adjust the tractor flow control as follows:

1. Set the tractor RPM to the expected operating speed.
2. Adjust the flow control on the tractor hydraulic valve until the rpm on the rate controller (RC300L) slows.
3. Then adjust the tractor flow control until desired rpm is achieved.

Please discuss with your dealer and ensure that the tractor being used has sufficient L/min to operate the machine.

Hydraulic System

Your Taege Air Seeder is fitted with a double acting hydraulic system with phasing rams and hydraulically driven turbine (fan) and travelling diverter valve (optional)

Care must be taken when coupling the machine to the tractor, ensuring that you are clear of all overhead power wires and that all persons are clear of the machine.

The hydraulic couplings are fitted with colour coded plugs and caps which indicate the hydraulic circuit being used.

IMPORTANT Always couple the "RETURN" hose first and un-couple the "RETURN" hose last.

BLACK = Larger return hose from oil cooler.

BLACK = Turbine (fan).

GREEN = Raise and lower. This circuit has an isolating valve and a flow valve to be used when the machine travelling on the road or when the machine is disconnected from the tractor.

RED = Raising or lowering the right and left wing units.

The tractor raise and lower hydraulics should be operated without using the float option for optimum ground penetration and contour following this ensures that the ground wheels remain in contact with the ground always.

YELLOW = 1st Auxillary for rear implement (if fitted).

BLUE = 2nd Auxillary for rear implement (if fitted).

Tyre Pressure

The recommended tyre pressures are shown on the respective manufactures websites. Generally 250 – 490 Kpa (18-35psi)

The air seeder will bounce excessively if the wheels are over inflated.

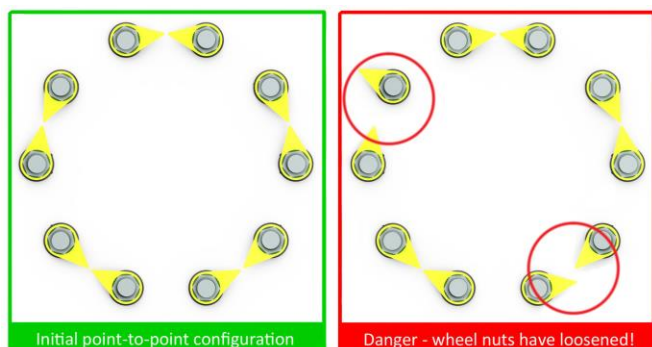
Jockey wheel maximum pressure cold. 22 psi (1.5 bar).

Wheel Nut Indicators

Checkpoint®: High visibility loose wheel-nut indicators.

Wheel nuts torque setting 300Nm

Indication below shows before and after.



DO NOT LUBRICATE NYLON BUSHES AND/OR NYLON BEARINGS

This makes an abrasive paste that will accelerate wear. This applies to all nylon bearings, bearing hangers and snap locks on the seed and fertilizer hoppers.

Jack Stand

Always check that the jack is stored correctly.

Daily Maintenance

Electrical Connections	Drill to tractor auxiliary connection Lead connections Wiring loom for damage
Drawbar	Lower linkage bar lynch pins
Bolts	All bolts
Tynes	Tyne tip bolts Dropper hose connections
Hopper	Sponges for damage
Hydraulics	Hose connections Oil leaks Hydraulic rams
Wheels	Tyre inflation (pressure)
Wheel nuts	Check tightness
Jack stand	Correct position
Lubrication	Grease daily where necessary

Notes

Warranty

From the date of purchase your Taege machine is covered by a 12-month warranty period for faulty parts and/or workmanship.

Ensure your dealer completes and returns a warranty certificate within 7 days of date of purchase.

Send to

Taege Engineering Ltd
Main West Road
Sheffield 7500
New Zealand.

On delivery record the following Basic Information

Model:

Chassis Number:

Delivery Date:

Owner: Dealer:

Check for shipping damage. In cases of shipping damage, ask dealer to arrange for appropriate claim to be lodged immediately.

- Ensure the attached registration / warranty validation card has been completed.
- Place owners copy of warranty in safe place.
- Check that the Dealers copy of the warranty has been correctly filled out and returned to the manufacturer
- Contact your dealer if you have any further queries.
- Disclaimer
- Drilling with Taege Air Seeders in conditions normally outside of the germination tolerances of the seed concerned cannot be expected to give satisfactory results.
- Every attempt has been made to ensure the correctness of information and diagrams in this manual. Consequently, Taege Engineering Ltd will not be responsible for any damage or consequential loss arising out of misinterpretation of, or failure to follow, recommended practices and procedures. Nor will Taege Engineering Ltd be liable for any damage caused by, or arising out of modification or misuse of its product. Taege Engineering Ltd reserves the right to change technical details and prices without prior notice.

A full copy of Taege Engineering Ltd warranty document is available from sales@taege.com upon request.