

*Stocks*AG

Fan Jet Pro

ORIGINAL OPERATING MANUAL & PARTS LIST



Read carefully before installation and operation

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E.C. DECLARATION OF CONFORMITY

Machine Type: Mounted Agricultural Implement - Pellet and Seed application broadcasters

Model(s):	Fan Jet Pro	All Variants and Versions
	Fan Jet Pro Plus	All Variants and Versions
	Fan Jet Twin	All Variants and Versions
	Fan Jet Mini	All Variants and Versions
	Fan Jet Duo	All Variants and Versions
	Turbo Jet	All Variants and Versions
	Rotor Meter	All Variants and Versions
	Rotor Meter Air Force	All Variants and Versions
	Micro Meter	All Variants and Versions
	Maxi Meter	All Variants and Versions

Serial No.

Manufacturer: Stocks Ag Ltd
Cromwell Road
Wisbech
Cambridgeshire PE14 OSD
United Kingdom


This is to declare that the above machine conforms to the relevant Essential Health and Safety Requirements of the Machinery Directive 2006/42/EC, implemented in the United Kingdom by Statutory Instrument 2008 No. 1597 – The Supply of Machinery (Safety) Regulations 2008 as amended.

The following standards have been applied in the design and construction of this machine:

BS EN ISO 12100:	2010	Safety of machinery – General principles for design – Risk assessment and Risk reduction.
BS EN ISO 4254-1:	2015	Agricultural machinery – Safety - General requirements.
BS EN ISO 4254-8:	2018	Agricultural machinery. Safety - Solid fertilizer distributors
BS EN ISO 13854:	2019	Safety of machinery – Minimum gaps to avoid crushing of parts of the human body.
BS EN ISO 13857:	2019	Safety of machinery – Safety distances to prevent hazard zones being reached by the upper and lower limbs.

The manufacturer stated above holds the technical file for this machine.

Signed on behalf of Stocks Ag Ltd


Name:..... **J Woolway**

Date: 06th August 2020

Position: Managing Director



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UKCA. DECLARATION OF CONFORMITY

Machine Type: Mounted Agricultural Implement - Pellet and Seed application broadcasters

Model(s):	Fan Jet Pro	All Variants and Versions
	Fan Jet Pro Plus	All Variants and Versions
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Signed on behalf of Stocks Ag Ltd

Name:  J Woolway

Date: 01st December 2020

Position: Managing Director

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1.0 General Information

Congratulations on your Fan Jet Pro purchase:

Please check the machine for any transport damage upon receipt and advise your supplier of any problems immediately. Late claims regarding any damage may be rejected.

Specifications, descriptions and illustrations in this manual are accurate at the time of this publication but may be subject to change. This manual is correct at the time of printing but Stocks-AG reserve the right to change and improve them. This machine is designed with safety in mind. Maintenance and servicing in accordance with this manual will ensure safe operation and reliability of your machine for many years.

This Operating Manual forms part of the machine and must be readily available for the operator who must read and follow the points covered before use.

1.1 Technical Data

Model: Fan Jet Pro Standard

Power requirement: 20 amps

Hopper capacity: 65 litre or 130 litre

Motor outputs: 170 watt

Max. spreading width: 24m

Max. disc speed: 3700 rpm

Rec. working width: 12 -24m

Noise level: 90dB

Operating voltage: 12v

65 litre machine:

130 litre machine:

Net weight: 32kg

Net weight: 36kg

Dimensions: 50 x 54 x 82cm
(Boxed 52 x 56 x 84cm)

Dimensions 60 x 60 x 94cm
(Boxed 62 x 62 x 96cm)

1.2 Intended Use

This Fan Jet Pro has been designed for use in the agricultural, horticulture and amenity sector to apply large dense slug pellets from 12 -24m and various small seeds and granular products to varying widths depending upon the seed or product density. It can also be used for game cover seeding and as a game feeder.

The applicator can be mounted to operate facing forwards or backwards. Often mounted on the rear of drills and sets of rolls to apply slug pellets.

Any other use is considered to be non-intended and the manufacturer will not be liable for any resulting damage.

The manufacturer is not liable for any resulting damage if the machine is used for any other purpose than the intended use and also includes compliance with the conditions for operation, maintenance, and repairs prescribed within this instruction manual.

The applicable accident prevention regulations as well as the other generally safety-related, occupational health and road traffic regulations must also be observed.

NOTE: Do not operate this machine during adverse weather conditions.

1.3 Unintended Use

This machine is not designed to apply abrasive materials such as sand & grit or for applying salt products.

The operator alone bears the associated risk if used for non-intended use.

1.4 Machine Identification

Example Decal Only



The machine serial number decal is mounted on the steel chassis to one side of the hopper

1.5 Warranty

We provide a 12 month warranty from the date of invoice (the invoice for the machine will serve as a warranty certificate).

This warranty is applicable for cases of material or construction faults and does not include parts that are damaged by normal or excessive wear.

Warranty expires if damage is caused by external forces, operator error, modifications, jet washing or if the machine has been used for unintended use.

In the event of any problems, or before attempting any repair please contact the company from where the machine was purchased. If the base machine or the controls system are modified in any way this will void any warranty claim.

Please see our conditions of sale for full details, a copy of which available upon request.

Please record the machine serial number here: S/N

Purchase date: Dealer

2.0 Safety

Ensure care is taken when lifting the machine. Safe lifting practice to be observed when handling as the net weight is over 25kg



- We advise safety shoes and protective gloves are worn when handling the machine.
- Assistance will be required when lifting or lowering the machine.
- Care to be taken to avoid crushing due to the weight of the machine.
- When lifting or fitting the machine on to a parent vehicle or implement ensure work is performed on level ground or flat surface to avoid slipping, stumbling or falling.

PERSONAL PROTECTION EQUIPMENT

It is the responsibility of the operator or maintenance engineer to ensure safe handling of the machine and the appropriate personal protection equipment must be worn for the material being applied and to prevent contamination to the machine or the environment.

⚠ WARNING! Ear protection required if working in close proximity to the machine as it exceeds 80dB.

PRODUCT APPLIED

If applying slug pellets or other toxic material and the parent vehicle has a closed cab the operator must ensure the cabin is always closed and the air filter system is in good order. If fitted to a UTV vehicle ensure the stability of the parent vehicle is not affected when the machine is in use. If in doubt contact the vehicle manufacturer for more information. After working the machine ensure that any unused product is returned safely to its original packaging. Stocks AG Ltd. does not accept any liability for the storage and use of the material being applied.

NOTE: If unsure contact your seed or product supplier for more information.

⚠ WARNING! Always observe all application standards and guidelines provided by the product manufacturer as some seed dressings and granular products may be toxic.

OPERATION AND MAINTENANCE

The machine may only be used, maintained and repaired by persons who have relevant experience or a machinery dealer who is aware of any risks involved. The applicable accident prevention regulations as well as the other generally safety related, occupational health and road traffic regulations must also be observed.

The manufacturer is not liable for any damage resulting from unauthorised modifications and the use of components and auxiliary parts. The machine must be checked regularly by the operator (before each use) for any damage, loose bolts or electrical connections, vibrations, unusual sounds, and to ensure they function correctly.

The machine must not be operated in wet weather conditions or during thunderstorms. Observe the generally applicable safety and accident prevention regulations. Always empty the hopper of toxic materials to prevent harm to humans and animals after each use and prior to storage.

⚠ WARNING! Do not put your hands inside the hopper when the agitator motor is turning as the agitator shaft inside the hopper rotates at high speed and is sharp and dangerous.

⚠ WARNING! Always isolate the power supply if servicing or leaving the machine unattended.

2.1 Safety Warning Decals

Important: Be aware of the safety warning below which are all relevant to this machine



⚠ WARNING!

Read and understand the Operators Manual instructions before operating this machine.

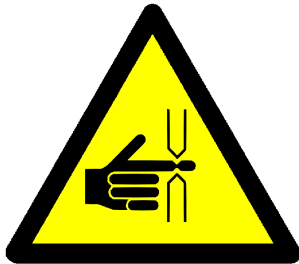
Operator errors can result in serious injury.



⚠ WARNING!

Danger due to thrown or flying objects.

Always maintain a safe distance whilst the machine is in operation.



⚠ WARNING!

Risk of injury. Possible trapping point when tipping hopper.



⚠ WARNING!

Risk of injury.

Be aware the feed mechanism is powerful and can cause serious injury.



⚠ WARNING!

Keep Clear!

Maintain a safe distance from the machine when in operation.

Wear the appropriate protective personal equipment.



⚠ WARNING!

Do Not Jet Wash This machine is not designed to withstand Jet Washing.

3.0 Emergency Stop Instructions

In the case of an emergency always switch off the main power switch on the control panel and isolate the power supply immediately by disconnecting the power cable.

**Main Power
On-Off switch**



4.0 Storage

Disconnect the power supply by unplugging the power cable or removing the fuse in the power cable if storing the machine for long periods.

It is the responsibility of the operator to ensure the hopper is empty after use and cleaned thoroughly before storage.

Store in dry conditions to protect the machine and control system from moisture.

Always clean and spray electrical connectors with a moisture repellent spray when not in use for long periods.

5.0 PVC Waterproof Covers - Optional

65L Waterproof PVC Cover Part No. SC65

130L Waterproof PVC Cover Part No. SC130

Heavy duty white PVC cover fitted with eyelets and bungee cord for easy attachment.

Please contact your local Stocks Ag dealer for more information.

6.0 Disposal

Ensure that any persons handling the machine are aware that the machine may have been used to apply toxic chemicals and so the appropriate personal protection equipment should be worn.

Ensure the hopper contents have been removed and any toxic residue removed and put back into a sealed container or disposed of in accordance with the manufacturers guidelines to eliminate any possible contamination of others or the environment.

Always adhere to the local disposal regulations. Paying particular attention to the plastics, rubber, and electrical components.

7.0 General Maintenance

Ensure the parent machine is stationary and parked on level ground before working on the machine.

The machine must be checked regularly by the operator for any damage, loose bolts or electrical connections, vibrations, unusual sounds and to ensure they function correctly.

⚠ WARNING! Always ensure the power supply is disconnected before any maintenance work or cleaning of this machine by unplugging the power cable or removing the fuse in the power cable.

Always observe all guidelines provided by the product manufacturer with regards to handling, storage and disposal of products.

Take care not to spill any product that could contaminate the machine or the environment, ensuring any product removed from the machine is put back into its original container.

⚠ WARNING! Protective clothing must be worn when applying or handling toxic products.

7.1 Before Use

1. Ensure the machine is securely mounted.
2. Check the power supply.
3. Check the feed block assembly to ensure the feed rollers are clean and replace any worn feed rollers.
4. Check the feed rollers rotate freely before starting work.

7.2 Daily Checks

1. Check the disc to motor shaft socket screws on the lower side of the spinning disc to ensure they are tight and the spinning disc turns with the motor.
2. Check the stainless disc for any wear or distortion and replace prior to use if necessary.
3. Check the feed block assembly to ensure the feed rollers rotate freely.

7.3 After Each Use

1. Empty hopper and clean the machine thoroughly.
2. Disconnect the power supply.
3. Replace the PVC waterproof cover (if applicable).
4. Store in dry conditions to protect the machine and control system from moisture.

⚠ WARNING!
DO NOT JET WASH THIS MACHINE!



8.0 Installation Guide

Safe lifting practice to be observed when handling the machine as the net weight is over 25kg.

Safety shoes and protective gloves to be worn when handling the machine.

With a full hopper the 65L machine could weigh in excess of 80kg and the 130L machine 135kg and so ensure the machine is securely attached to a suitably strong rigid mounting point.

If unsure seek advise from the parent machine manufacturer or supplier.

Locally fabricated mounting frames are not the responsibility of Stocks Ag Ltd.

NOTE: The machines can be operated facing forwards or backwards.

Ensure the disc height is a minimum of 1 metre above the crop canopy or the ground – more height may improve the maximum spread width.

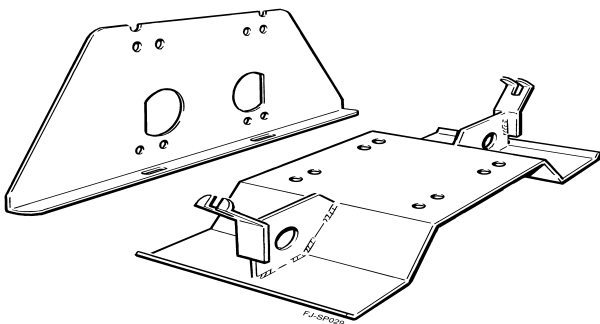
Ensure the power cable is connected direct to the parent vehicle 12v battery and the fuse is fitted correctly.

Always adhere to Health and Safety guidelines when mounting or fabricating an appropriate mounting frame and always wear suitable protective clothing.

8.1 ATV Fitting Kit - Optional

ATV fitting Kit available: Part No. FJ-005-BKT (available through your local dealer).

NOTE: Always check specification of any ATV rear carrier before ordering.



Many rear carriers will not have the load carrying capacity to support the weight of a fully laden Fan Jet mounted on an ATV kit. Please check with your ATV supplier as modification may be available.

The Stocks ATV Kit provides a quick and easy way to attach your Fan Jet to the rear carrier of your ATV. Designed as a universal fitment to elevate the Fan Jet to gain more height to the spinning disc.

The formed steel base plate with quick fit clamps and jacking screws to mount the machine to the base plate and to adjust the angle of the disc when the ATV is fully laden.

The kit includes an operator protection plate which bolts onto the back frame of the machine plus a short power and connector cable to maximise the power at the disc motor.

These are to be fitted rather than the standard length cables supplied with the Fan Jet machine.

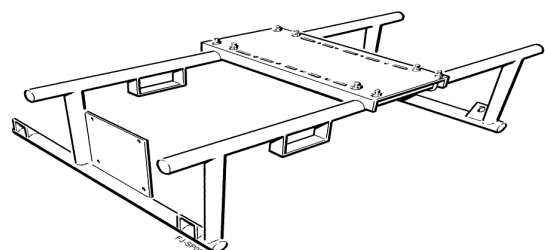
NOTE: The control panel is not waterproof and so will need to be protected.

8.2 UTV Fitting Kit - Optional

Part No. FJ-005-UTV (available through your local dealer).

The cost option UTV kit available for most UTV fitments. Offering a sturdy fitting option with 4 hooked anchor points with hand release fittings.

One piece tubular steel construction with detachable machine mounting plate. Fixed fork lift point safe and easy lifting on and off vehicle.



8.3 Mounting Plate

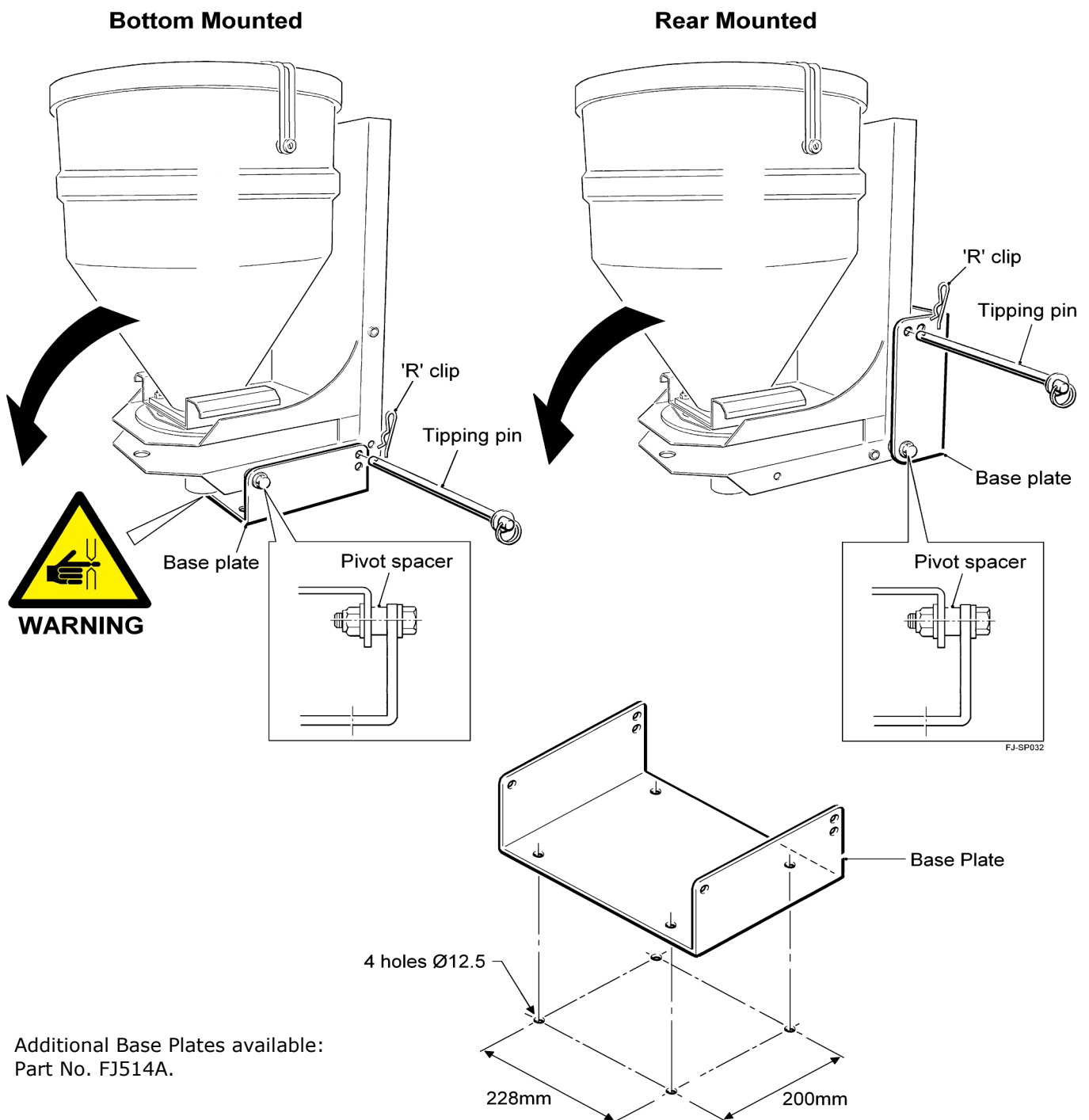
Mount the machine using the tipping base plate. This has 4 holes in the base to take M12 bolts (see below) use these to attach to the parent vehicle. The base plate can be repositioned to fit the holes in the back of the machine to attach to a vertical mounting point – use whichever is best for you.

Ensure there is sufficient room to tip the hopper for emptying and ensure any potential trapping points are noted taking care not to trap hands or fingers.

The tipping base plate is attached to the chassis by 2 bolts and spacers which act as the pivot, and a removable steel pin secured by an 'R' clip. There are 2 positions for the pin – use these to help level the Fan Jet

The machine must be on level ground or flat surface before tipping the hopper to avoid the hopper accidentally tipping forward once the tipping pin has been removed.

To tip the hopper, remove the pin whilst supporting the hopper, lower gently when emptying the hopper.



Additional Base Plates available:
Part No. FJ514A.

8.4 Hopper Emptying & Removal Procedure

Removing the hopper for cleaning and maintenance.

Ensure appropriate personal protection equipment is worn for the product being applied.

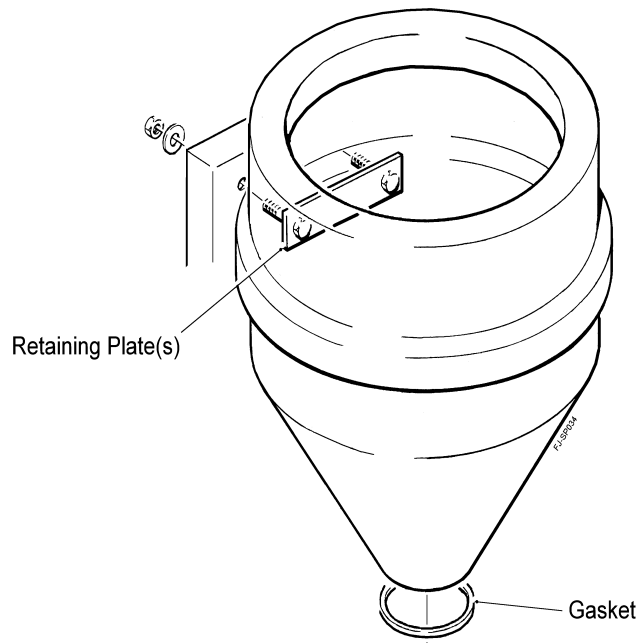
Ensure there is sufficient room to tip the hopper for emptying and ensure any potential trapping points are noted, taking care not to trap hands or fingers.

NOTE: The machine must be on level ground or flat surface before tipping the hopper to avoid the hopper accidentally tipping forward once the tipping pin has been removed.

Release the rubber lid retaining straps and remove the lid.

To tip the hopper, remove the R Clip and washer. Whilst supporting the hopper, remove the Tipping Pin, lowering gently when emptying the hopper through the three outlet holes in the top. When replacing the hopper ensure the gasket fitted under the base of the hopper is in good order.

Replace if damaged: Part number FJ017S.



9.1 Clearing a Blockage

Switch off the main power switch on the control panel.

Ensure the parent machine is stationary, switched off, and parked on level ground.

Ensure the main power switch on the control panel is off and unplug the 2 core power supply cable from the control box or disconnecting the power cable from the vehicle battery.

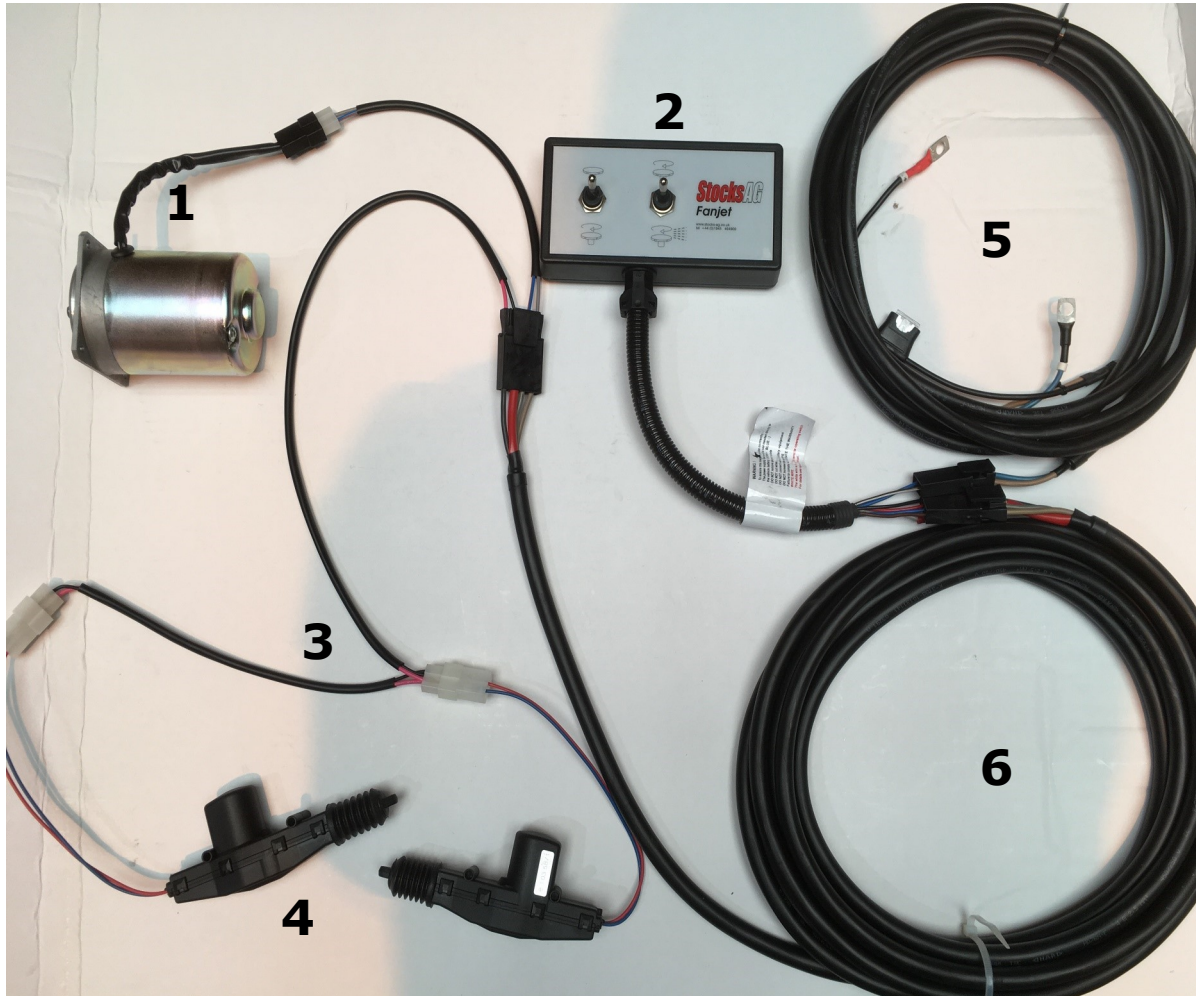
Ensure appropriate personal protection equipment is worn for the product being applied.

Ensure any product removed is put back into its original container.

Care to be taken not to spill any product that could contamination the environment.

10.0 Electrical Components

- | | |
|--|--|
| 1. FJ057D Disc Motor | 4. FJ051C Shutter Mechanism "Slave Motor" |
| 2. FJ117B Fixed Disc Seed Control Panel | 5. FJ107D Fused Power Cable - 5m |
| or | 6. FJ108D Control Connector Cable - 6m |
| 2. FJ114B Variable Disc Speed Control Panel | |
| 3. FJ109C Tail Piece | *Optional cables available |



10.1 Electrical Connections

Power requirement is 12 volts with a minimum continuous 20amp supply. The Fan Jet Pro is supplied with a control console and all wiring.

Ensure the power supply cable is connected directly to the vehicle battery to ensure maximum power.

Connect the positive wire (fused) to the positive (+) terminal and negative earth connection to the negative (-) terminal. The disc should rotate in a clockwise direction when viewed from above.

Failure to connect to the vehicle battery may result in control function problems and possible damage to the vehicle battery. The charging system must be in good condition to achieve the best results. All cables and controls are fitted with matching plugs and sockets. Extension cables are available.

Any modification to the wiring, fuse holder or controls will invalidate any warranty claim and may affect the performance of the Fan Jet.

Always replace any blown fuse with the same rated fuse as the original one fitted.

11.0 Control System Operation

1. Main Power Switch.
2. Feed Mechanism Switch.
3. 12-position dial **Vario-Speed control console only** used to increase or decrease the speed of the disc.

NOTE: The feed switch will not operate without the disc motor running.

Can be used to match the spread width to an implement or bout width. Also useful when applying slug pellets to a 12m working width or broadcasting seeds.

Both panels are supplied with self-adhesive Velcro strips to attach the console to a suitable surface.

Fixed Speed Control - Pt No. FJ117B

Vario-Speed Control - Pt No. FJ114B



- 1) Left Hand Toggle Switch - Main Power and Disk on / off.
- 2) Middle Toggle Switch - Feed shutter on / off.

- 1) Left Hand Toggle Switch - Main Power and Disk on / off.
- 2) Middle Toggle Switch - Feed shutter on / off.
- 3) Right Hand Dial - Variable Disc Speed.

⚠ WARNING! Ensure the position and operation of the control panel does not affect the visibility of the operator or the ability to control the parent machine.

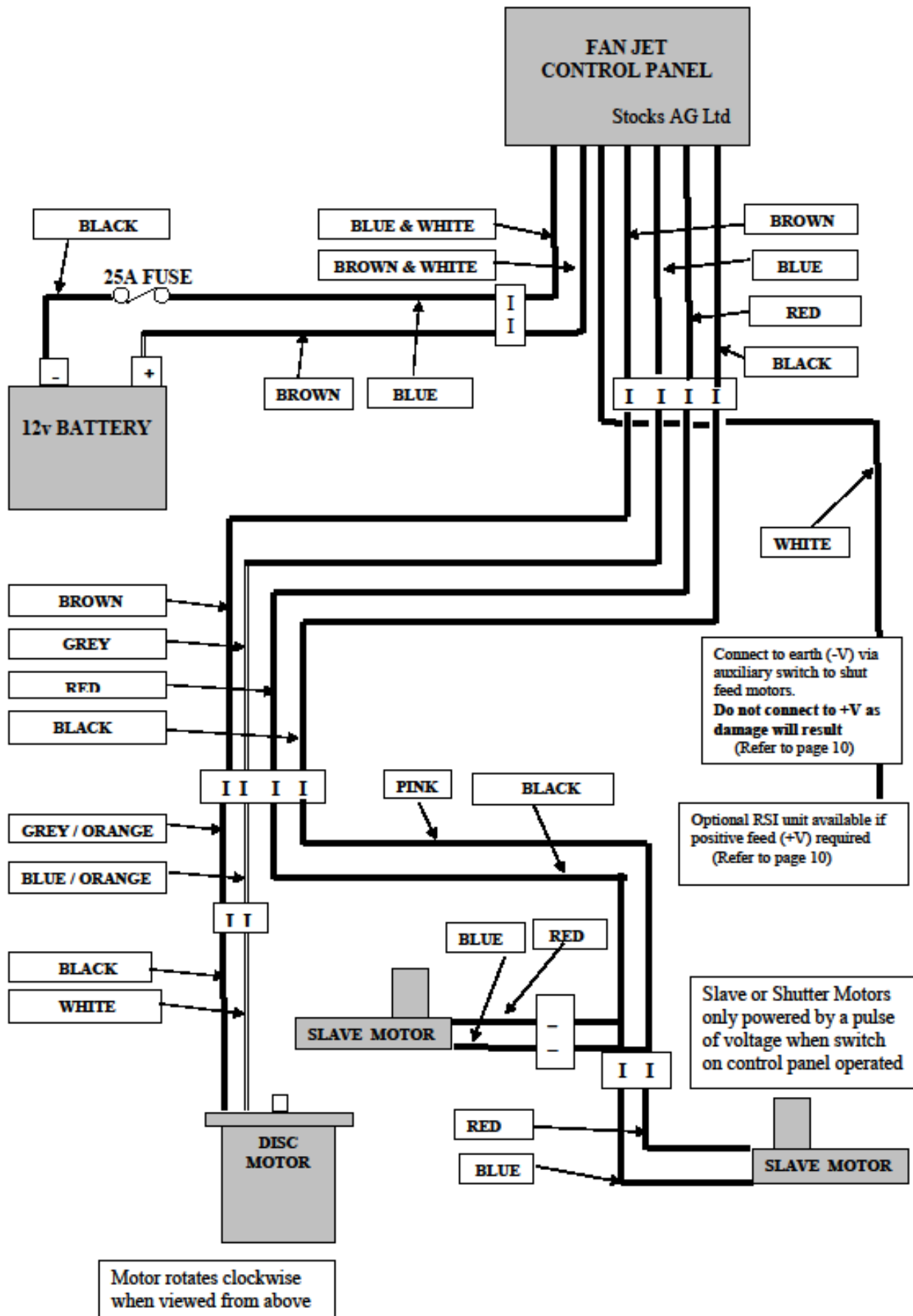
11.1 Remote Switch Facility

The spare "white wire" from the control panel can be earthed to negative (-V) via a suitable remote switch to offer remote feed shutter operation if required. **This wire not connected in normal working situations.**

⚠ WARNING! DO NOT connect the "white wire" to positive (+V) as this will damage the panel and invalidate the warranty

A cost option interface is available if the white wire needs to be earthed to positive (+V) Part No. FJ-004 RSI.

12.0 Wiring Diagram



13.0 Spreading Slug Pellets

It is important that you always test the pellets through the Fan Jet to establish the spread width and pattern before you go to work and to enable you to calibrate the Fan Jet. Be aware the spread pattern could be thinner towards the outer edges.

It is the responsibility of the operator or maintenance persons handling the machine to ensure the appropriate personal protection equipment be worn for the material being applied or contaminating the machine and to ensure that no other persons enter the spreading zone whilst the machine is in operation.

Always observe all application standards and guidelines provided by the manufacturer of any product as some products are toxic.

Our advice is do not restrict the spreading width in any way except for headland control, and to calibrate for and drive at your desired bout width and accept any overlap between bouts during in-field work.

NOTE: If using crop sprayers at fixed tramline widths, be aware that these may not match the spreading width, and the spread pattern could be thinner towards the outer edges.

NOTE: If using an ATV, it is better to work at half the tramline width to achieve a good spread pattern with overlap between bouts, even at high speeds. Our purpose built ATV kit recommended as this includes short electrical cables to maximise performance.

Practice good husbandry to minimise crop damage. Apply pellets before, during, or immediately after drilling or planting operations, especially where weather and soil conditions may result in a high slug population, and for susceptible crops such as OSR, especially double low varieties. Inspect crops and re-apply pellets as required.

13.1 Spreading Seed

The Fan Jet Pro can be used to spread many small seeds such as: Grass, OSR, mustard, turnips, other seeds and granular products that flow freely through the feed aperture. The spread width will depend on the size and density, actual widths may be more or less depending upon disc speed.

It is the responsibility of the operator to ensure that no other persons enter the spreading zone whilst the machine is in operation.

It is important that you always test the seed through the Fan Jet Pro to establish the spread width pattern before you go to work, and to enable you to calibrate the Fan Jet.

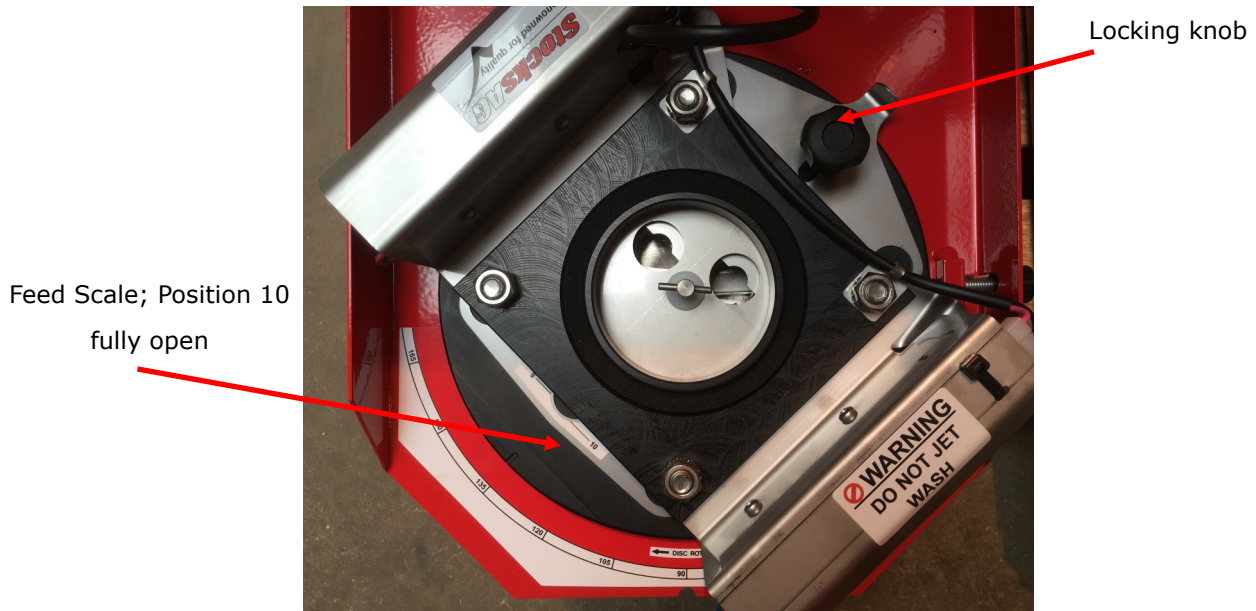
NOTE: An optional grass agitator is available to assist when spreading grass seed to help prevent seed bridging in the hopper.

A Grass Seed Deflector Kit is recommended if fitting to a grass harrow or similar implement. Designed to enable the seed to be directed across the spread width rather than be spun out in an arc to help reduce wind disturbance.

14.0 Setting the Feed Rate

To adjust the feed rate, undo the black plastic locking knob at the centre rear of the hopper and slide the feed regulator plate to the required setting, reading from the 0-10 scale decal. Re-tighten the locking knob.

Position 10 is the highest feed rate with the feed apertures fully open.

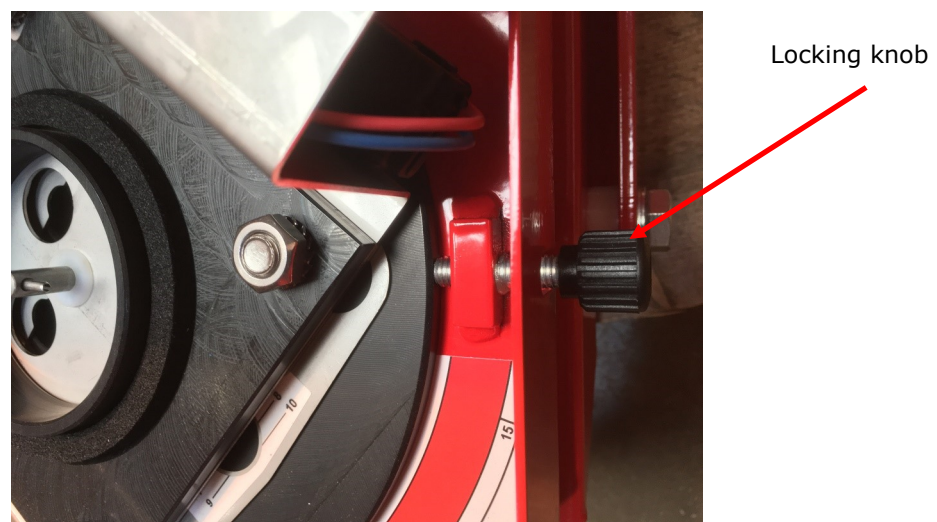


NOTE: We recommend you carry out your own product calibration test for each product and application rate.

14.1 Setting the Spread Bias

(Factory set at 90 degrees)

The complete feed mechanism can be rotated to bias the spreading arc to the left or right, and even out the spread pattern equally from the centre-line of the machine for in-field work, and as a headland control at field borders. To adjust, undo the black plastic locking knob on the side of the machine and using the stainless steel motor cover, rotate the complete circular mechanism as far as required, moving the indicator dimple in the direction in which you want the arc to swing. Re-tighten the locking knob.



15.0 Spread Width and Pattern

Basic Rule; The spread width is dependent upon the density of the granule or seed, and the disc speed (plus other factors).

Large, dense granules and seeds with a high disc speed give the maximum spread width – small, light granules and seeds will not spread as far.

Other factors affect the spread width:

Type of slug pellet. Typically, a large, dense hard pellet should spread further than a small, light, soft pellet, because it is comparatively heavy and does not powder on the disc. Typically, a 'wet' produced pellet will be hardest, a steam produced pellet mid range, and a dry produced pellet the softest. However, the line between traditional 'mini' pellets and 'full size' is blurred as most are of similar size and some lower priced dry produced pellets termed, as 'minis' are actually larger and heavier than more expensive wet produced pellets, and can have a good spreading characteristics.

Seed varieties and dressings. Different varieties of seeds and seed dressings will have different densities and so they affect the maximum spread width possible.

Wind conditions. Dead calm conditions are the optimum; any wind will affect the width pattern.

High forward speed. The same as driving into a headwind of the same speed on a calm day, and this will peel the edges of the spread pattern backwards and inwards.

Disc speed. If the Vario-Speed control console is used, altering the disc speed will affect the width and pattern. A higher disc speed will give a wider spread width.

Disc vanes. Ensure they are in good condition and not worn excessively. Replace if necessary.

Part No. FJ009B includes 2 vanes and fixings.

Low disc height. Will not allow the product to reach its maximum width before gravity takes over.

Low electrical power. Will not allow the disc to reach full speed.

High application rates. Loads the disc more than a lighter rate and can slow it down.

Incorrect disc angle. It must be at least horizontal – not angled downwards.

Spread bias. This can be adjusted to centralise the pattern, left and right of centreline.

Adjustable deflectors. We do not recommend that these are used for in-field work but only for the headland control on the outside bouts. It is possible to adjust them to restrict the width overall or just one side, but they may cause increased breakage of the granules or seed damage.

Our advice would be to use them in conjunction with the Vario-Speed control panel, where this is used, to reduce the disc speed and the deflectors positioned to help limit the spread width.

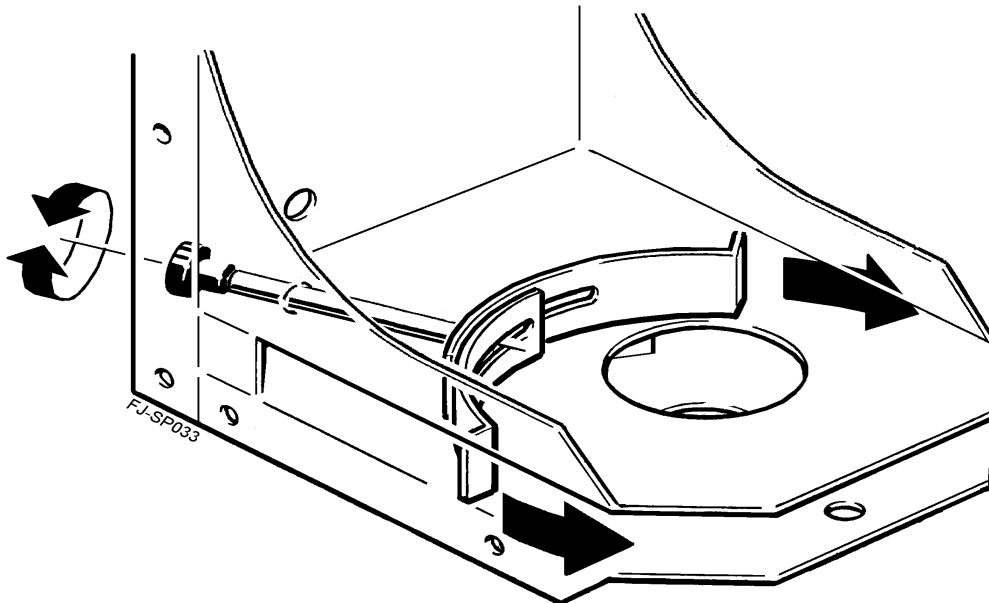
NOTE: Stop after a few metres work to ensure the distribution, spread width and application rate are correct - Then check periodically.

16.0 Setting the Headland Deflectors

Ensure the power supply has been disconnected before adjusting any deflector plates or fitting the calibration chute.

Adjustable deflectors that reduce the exit aperture from the disc are incorporated into the Fan Jet Pro to physically limit the spread width for headland control.

Undo the black plastic knob at the rear of the chassis and slide each deflector around the disc as far as required to prevent chemical granules from entering a watercourse or grass margin. Tighten the knob.

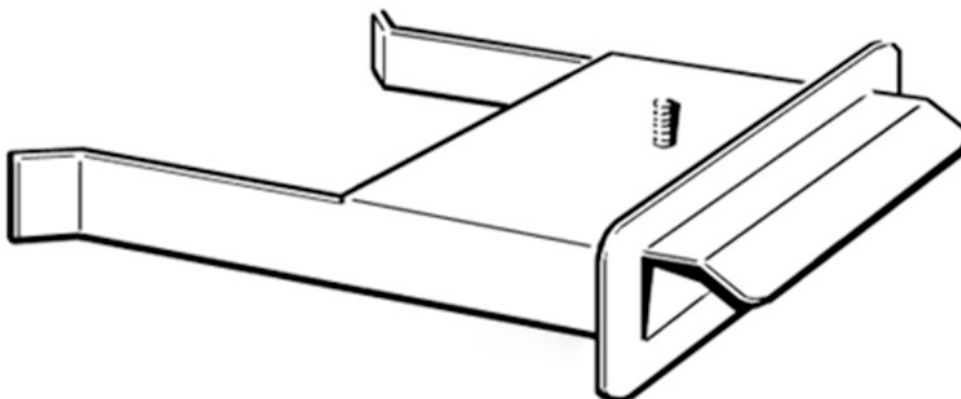


NOTE: If using a Vario-Speed control console, this can be used by itself or in conjunction with the deflectors, and the bias adjustment.

16.1 Calibration Chute - Optional

This calibration chute enables product spinning off the disc to be collected more safely.

Part No. FJ-004-CAL-PRO



Always wear the appropriate protective clothing for the product being used.

If calibrating with slug pellets, or any other pesticide, please ensure that any spilt product is collected immediately and put back in its original container as soon as the calibration process has been completed.

Do not allow slug pellets or other pesticides to contaminate water supplies.

17.0 Grass Seed Agitator - Optional

The Grass Seed Agitator is included in the Grass Seed Deflector Kit or can be supplied separately.

Available as a separate item: Part No. FJ035G

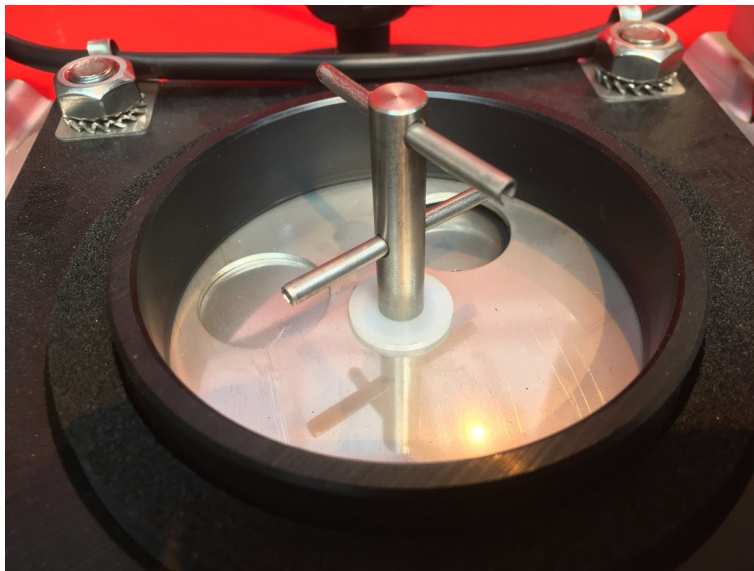
To remove the original standard agitator - use the 3mm Allen key provided and loosen the upper grub screw on the central hub of the fan disc - once loosened the agitator will pull out from within the hopper.

Original Agitator



Grass Seed Agitator

The grass seed agitator can now be fitted, ensure the replacement white nylon washer has been fitted onto the shaft before fitting and re-tightening the retaining grub screw.



The Grass Seed Agitator kit includes:

- 1 x Grass Seed Agitator
- 1 x White Nylon Washer
- 1 x 3mm Allen Key
- 1 x M6 x 6 Grub screw

NOTE: The grass seed agitator must be fitted when applying grass seed to help prevent bridging of seed in the hopper.

Retain the original standard agitator and keep in a safe place for use with any other products or seed.

18.0 Grass Seed Deflector Kit - Optional

Part Number FJ—004-DEFLECTOR.

Recommended if fitting to a grass harrow or similar implement.

Designed for Fan Jet Pro machines to enable the seed to be directed across the spread width rather than be spun out in an arc to help reduce wind disturbance.

Supplied with a two side arms (items 8 & 9) which enable the deflector kit to be fitted onto the existing Fan Jet Pro chassis or frame.

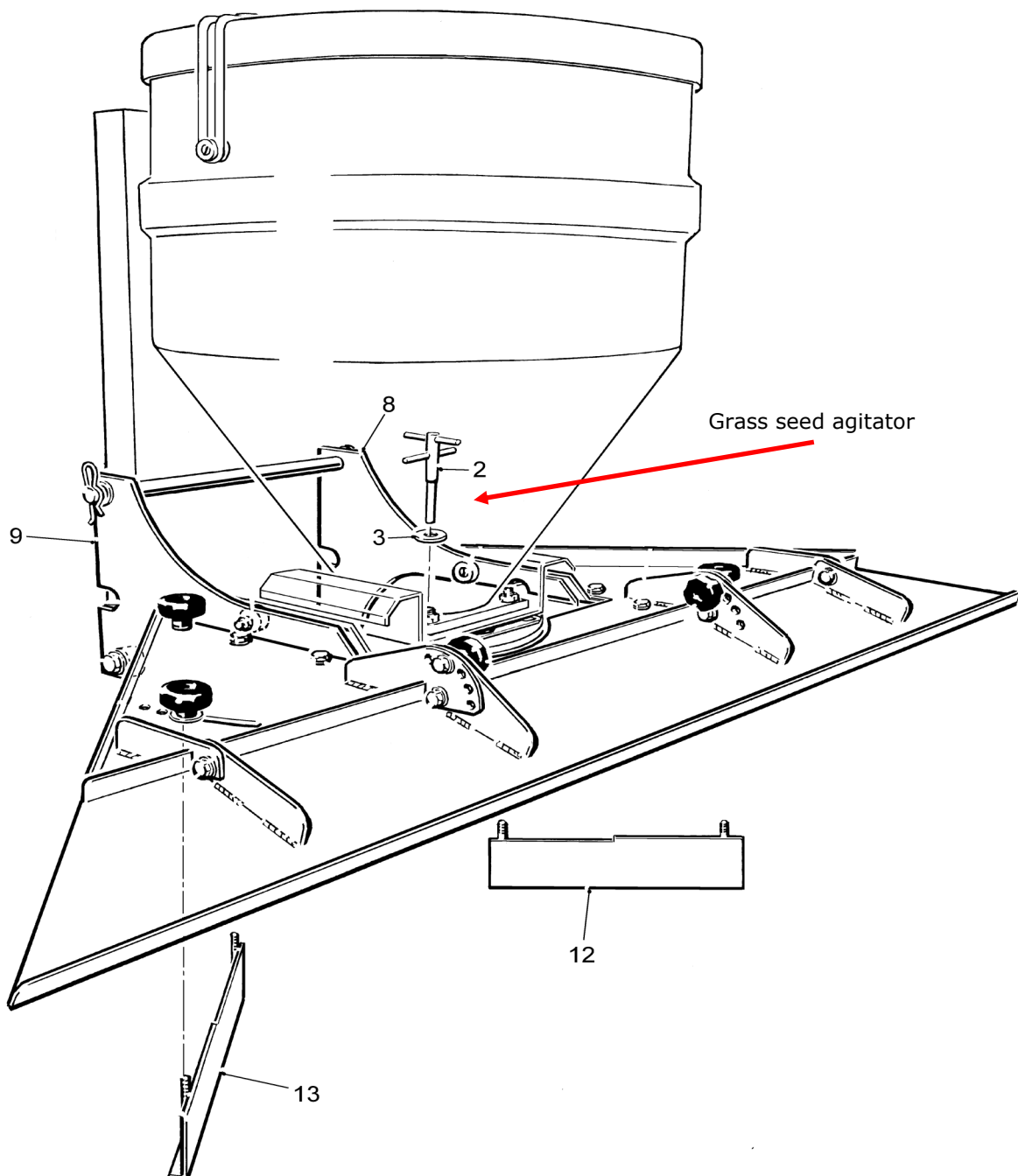
The front flap is fully adjustable so that the correct angle can be set to suit the application required.

NOTE: The grass seed agitator (item 2) must be fitted when applying grass seed.

With two adjustable vanes (items 12 & 13) spread width can be limited to 2-3m working width.

Without the vanes fitted the Fan Jet Pro will spread grass seed over a 6m working width.

The Vario-Speed Control Panel is recommended when the working width is below 5m.



19.0 Product Calibration Guide

Before calibrating your Fan Jet Pro, establish the working width required and the maximum spread width possible with the product being applied.

Working in a safe area and ideally on a hard surface so that product is visible on the ground and can be swept up after calibration work has been completed.

Place a minimal amount of slug pellets, seed or granules in the hopper.

Always observe all application standards and guidelines provided by the manufacturer of any product as some products may be toxic.

Switch ON the main power switch to operate the spinning disc. Switch ON the feed shutter switch for a few seconds to allow enough product to be broadcast to establish the working width allowing for a small overlap.

APPLICATION RATE

Place a minimal amount of slug pellets, seed or granules in the hopper - typically just a few kilograms

The feed shutters only work when the disc is switched on. Switch feed shutter ON and OFF to start and stop the catch test.

If using a Vario-Speed control, the disc speed can be lowered when calibrating providing it is sufficient to throw the pellets clear of the disc.

Optional calibration chute recommended for this operation to limit exposure to product being thrown from the spinning disc.

Finish by carefully tipping the Fan Jet Pro forwards on its tipping base plate and gently shaking to empty any product or seed left in the chute and under the disc, into the bag before weighing (or removing the chute when finished).

Some smaller, lighter and less dense pellets may not reach the full width especially in breezy conditions, and with many pellets the pattern may be thinner towards the outer edges. Ensure conditions are good and the discs are a minimum of 1m above the ground or crop canopy. Ensure the spread width and pattern is adequate for your requirements before going to work.

You will have to perform a catch and weigh test to establish the flow rate of product, and will need a suitable container to collect the product being metered and an accurate set of scales to weigh kilograms and grams, and a timer.

CALCULATING APPLICATION RATE

To establish the correct flow rate of product for your bout width, forward speed and application rate use the below formula:

Method

Use the following formula to establish the flow rate – this is a 1 minute catch test universal for all machines, products, widths and speeds.

$$\frac{\text{Application rate (kgs/ha)} \times \text{forward speed (kph)} \times \text{spread width (metres)}}{600} = \text{Flow rate in kgs per min}$$

Example 1.

The required application rate is 25 kilograms per hectare. The target forward speed is 10 kilometres per hour. The bout width is 6 metres wide.

$$\frac{25 \text{ kgs/ha} \times 10 \text{ kph} \times 6 \text{ metres}}{600} = 2.5 \text{ kgs per minute flow rate}$$

Example 2.

The required application rate is 5.5 kilograms per hectare. The target forward speed is 12 kilometres per hour. The bout width is 4.25 metres wide.

$$\frac{5.5 \text{ kgs/ha} \times 12 \text{ kph} \times 4.25 \text{ metres}}{600} = 467 \text{ grams per minute flow rate}$$

19.1 Slug Pellet Calibration Guide

Standard Slug Pellets - 24 meters

These settings are to be used as guides only, it is important you always test the product through the machine to establish the spread width pattern and rate are accurate.

Slug Pellets - 24 meters

These settings are to be used as guides only, it is important you always test the product through the machine to establish the spread width pattern and rate are accurate.

		FORWARD SPEED km/h																												
		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
Feed Opening Setting	1																													
	2																													
	3	10.6	8.5	7.0	6.0	5.3	4.7	4.2	3.8	3.5	3.2	3.0	2.8	2.6	2.5	2.3	2.2	2.1	2.0	1.9	1.8	1.7	1.7	1.6	1.5	1.5	1.4	1.4	1.4	
	4	16.7	13.4	11.2	9.6	8.3	7.4	6.7	6.1	5.6	5.1	4.8	4.5	4.2	4.0	3.8	3.5	3.3	3.2	3.0	2.9	2.8	2.6	2.5	2.6	2.4	2.3	2.2	2.2	
	5	22.7	18.2	15.2	13.0	11.3	10.1	9.1	8.2	7.6	7.0	6.5	6.1	5.7	5.4	5.1	4.8	4.5	4.3	4.1	3.9	3.8	3.6	3.5	3.3	3.2	3.1	3.0	3.0	
	6	27.6	22.1	18.4	15.7	13.8	12.2	11.0	10.0	9.2	8.5	7.9	7.4	6.9	6.5	6.2	5.8	5.5	5.2	5.0	4.8	4.6	4.3	4.2	4.1	3.9	3.8	3.6	3.6	
	7	32.3	25.9	21.6	18.4	16.1	14.3	12.9	11.7	10.8	9.9	9.2	8.6	8.1	7.7	7.2	6.8	6.5	6.1	5.9	5.6	5.3	5.1	4.9	4.7	4.6	4.4	4.2	4.2	
	8	34.4	27.5	22.9	19.6	17.2	15.2	13.8	12.5	11.5	10.6	9.8	9.2	8.6	8.2	7.7	7.2	6.9	6.5	6.2	6.0	5.7	5.4	5.2	5.0	4.9	4.7	4.5	4.5	
	9	38.3	30.6	25.5	21.8	19.1	16.9	15.3	13.9	12.8	11.7	10.9	10.2	9.6	9.1	8.6	8.1	7.7	7.2	6.9	6.6	6.3	6.0	5.8	5.6	5.4	5.2	5.0	5.0	
	10	41.2	33.0	27.5	23.5	20.5	18.2	16.5	14.9	13.7	12.6	11.8	11.0	10.3	9.8	9.2	8.7	8.2	7.8	7.5	7.1	6.8	6.5	6.3	6.0	5.8	5.6	5.4	5.4	

NOTE: For guidance only, above figure relate to kg/ha

These figures are based on CDP Minis / Pesto M / Lynx S (Pesto and links Lynx S are registered trademarks)

19.2 Grass Seed & OSR Calibration Guide

These settings are to be used as guides only, it is important you always test the product through the machine to establish the spread width pattern and rate are accurate.

Grass Seed - 6 meters

		FORWARD SPEED km/h																
		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Feed Opening Setting	1																	
	2	14.2	11.4	9.5	8.1	7.1	6.3	5.7	5.1	7.4	4.3	4.0	3.8	3.5	3.3	3.2	3.0	2.8
	3	30.0	24.0	20.0	17.1	15.0	13.3	12.0	10.8	10.0	9.2	8.5	8.0	7.5	7.1	6.7	6.3	6.0
	4	46.8	37.5	31.3	26.7	23.4	20.8	18.7	17.0	15.6	14.3	13.3	12.5	11.7	11.1	10.5	9.8	9.3
	5		50.0	41.6	35.6	31.2	27.7	25.0	22.6	20.8	19.1	17.8	16.6	15.6	14.8	14.0	13.1	12.5
	6			45.4	38.9	34.0	30.2	27.2	24.7	22.7	20.9	19.4	18.1	17.0	16.1	15.2	14.3	13.6
	7				42.8	37.5	33.3	30.0	27.2	25.0	23.0	21.4	20.0	18.8	17.8	16.8	15.8	15.0
	8					41.6	37.0	33.3	30.3	27.7	25.5	23.7	22.2	20.8	19.7	18.6	17.5	16.6
	9						39.1	35.2	32.0	29.4	27.0	25.1	23.5	22.1	20.9	19.7	18.5	17.6
	10							37.5	34.0	31.2	28.7	26.7	25.0	23.5	22.2	21.0	19.7	18.7

NOTE: For guidance only, above figure relate to kg/ha

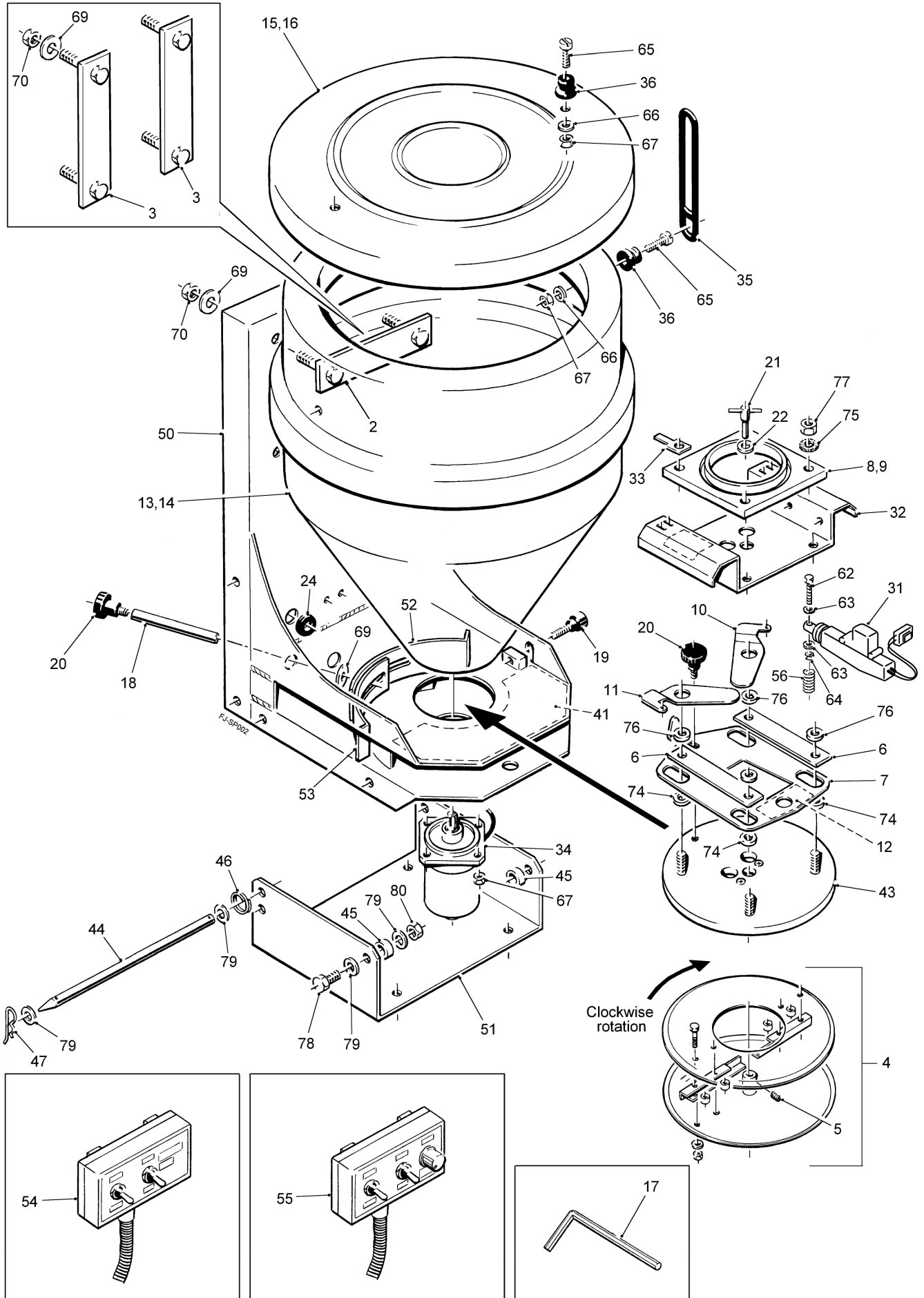
These settings are to be used as guides only, it is important you always test the product through the machine to establish the spread width pattern and rate are accurate.

OSR - 12 meters

		FORWARD SPEED km/h																
		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Feed Opening Setting	1																	
	2	22.0	17.6	14.7	12.5	11.0	9.7	8.8	8.0	7.3	6.7	6.3	5.8	5.5	5.2	4.9	4.6	4.4
	3	32.6	26.0	21.7	18.6	16.3	14.4	13.0	11.8	10.8	10.0	9.3	8.6	8.1	7.7	7.3	6.8	6.4
	4	46.8	37.5	31.2	26.7	23.4	20.8	18.7	17.0	15.6	14.3	13.3	12.5	11.7	11.1	10.5	9.8	9.3
	5			41.6	35.6	31.2	27.7	25.0	22.6	20.8	19.1	17.8	16.6	15.6	14.8	14.0	13.2	12.5
	6				42.8	37.5	33.3	30.0	27.2	25.0	23.0	21.4	20.0	18.8	17.8	16.8	15.8	15.0
	7					41.6	37.0	33.3	30.2	27.7	25.5	23.7	22.2	20.8	19.7	18.6	17.5	16.6
	8						41.6	37.5	34.0	31.2	28.7	26.7	25.0	23.5	22.2	21.0	19.7	18.7
	9							42.8	38.8	25.7	32.8	30.5	28.5	26.8	25.3	24.0	22.5	21.4
	10								45.3	41.6	38.3	35.6	33.3	31.3	29.6	28.0	26.3	25.0

NOTE: For guidance only, above figure relate to kg/ha

20.0 Fan Jet Pro Parts Diagram



20.1 Fan Jet Pro Parts List

Item	Part #	Description	Qty	Remarks
3	FJ003A	Hopper Bracket	1	65L only
3	FJ005A	Hopper Bracket	2	130L only
4	FJ007D	Disc Assembly (2 vane x Ø10mm bore)	1	
5	FJ008A	M6x6mm Grub Screw	3	
6	FJ015B	Separator Plate	2	
7	FJ016C	Feed Regulator Plate	1	
8	FJ017D	Hopper Base Plate	1	
9	FJ017S	Base Plate Seal	1	Not shown
10	FJ019A	Shut-off Plate RH	1	
11	FJ019B	Shut-off Plate LH	1	
12	FJ025C	Decal Feed scale 0-1-2-	1	
13	FJ026A-Ass.	65 Litre Hopper Assembly	1	items 35 and 36 fitted
14	FJ026B-Ass.	130 Litre Hopper Assembly	1	items 35 and 36 fitted
15	FJ027A-Ass.	65 Litre Hopper Lid Assembly	1	items 35 and 36 fitted
16	FJ027B-Ass.	130 Litre Hopper Lid Assembly	1	items 35 and 36 fitted
17	FJ028A	3mm Allen Key	1	
18	FJ030A	Deflector Knob Extension	1	
19	FJ031A	M8x30mm Knob	1	
20	FJ032A	M8x8.5mm Knob	2	
21	FJ035D	Agitator	1	
22	FJ036A	Nylon Washer	1	
23	MD050	Decal "Warning" Read Operators Manual	1	Not shown
24	FJ039A	Rubber Grommet	3	
31	FJ051C	Slave Motor	2	
32	FJ053A	Top Plate	1	
33	FJ054A	Cable Clamp	1	
34	FJ057D	Disc Motor	1	
35	FJ103A	Rubber Tensioner	2 (3)	(130L)
36	FJ104A	Bobbin	4 (6)	(130L)
37	FJ107D	Power Cable 5m	1	
38	FJ108D	Connector Cable 6m	1	
39	FJ109C	Tail Assembly Cable	1	

20.2 Fan Jet Pro Parts List Continued

Item	Part #	Description	Quantity	Remarks
41	MD016	Decal "Quadrant scale"	1	
42	n/a	Decal "Serial Number /	1	(not shown)
43	FJ413A	Turntable Plate	1	
44	FJ415A	Tipping Plate Pin	1	
45	FJ417A	Nylon Spacer	2	
46	FJ418A	Split Ring	1	
47	FJ419A	Ø3 R' Pin	1	
48	FJ422	160x4.8mm Cable Tie	5	(not shown)
49	FJ423	Self Adhesive Cable Tie	2	(not shown)
50	FJ500A	Chassis	1	
51	FJ514A	Tipping Bracket	1	
52	FJ515A	Long Deflector RH	1	
53	FJ516A	Short Deflector LH	1	
54	FJ117B	Standard Control Panel	1	
55	FJ114B	Vario-Speed Control Panel	1	
56	FJ051S	Spring	2	
57				
58				
59				
60				
61				
62	M3-001	M3x16 Screw	2	
63	M3-005	M3 Flat Washer	4	
64	M3-008	M3 Nyloc Nut	2	
65	M5-012	M5x25 Slot Head CSK	4	Qty x6 on 130L
66	M5-014	M5 Flat Washer	4	Qty x6 on 130L
67	M5-017	M5 Nyloc Nut	8	Qty x10 on 130L
68				
69	M8-012	M8 Repair Washer	3	Qty x5 on 130L
70	M8-017	M8 Nyloc Nut	2	Qty x4 on 130L
71				
72				
73				
74	M10-017A	M10 Flat Washer x 2.5mm	4	
75	M10-026	M10 Star Washer	4	
76	M10-017	M10 Flat Washer x 1.8mm	4	
77	M10-023	M10 Nut	4	
78	M12-004	M12x35 Screw	2	
79	M12-008	M12 Flat Washer	6	
80	M12-014	M12 Nyloc Nut	2	

21.0 Fault Finding


Always ensure the machine is switched off and the power supply isolated before carrying out any checks

Spinning Disc will not rotate:

1. Check that the power cable is connected direct to the vehicle battery.
2. Check power supply cable for any damage.
3. Check the inline fuse and replace if necessary.
4. Check the motor by powering from an independent power supply and replace if necessary.
5. Check power supply from control panel to machine. If no power, replace the control panel.

Feed Shutters will not operate correctly:

1. Check that the power cable is connected directly to the vehicle battery and check the fuse.
2. Check that the power cable polarity matches the battery polarity.
3. Check the instrument cable for any damage.
4. Check for any blockages or foreign objects jamming the feed mechanism.
5. Check the shutter slave motors operate freely and replace if faulty.
6. Check power from switch wire to slave motor for pulse of current when switch is operated.
7. If no current detected possible panel failure.
8. If constant current detected the panel is faulty and needs to be replaced.

 WARNING! Always observe all application standards and guidelines provided by the product manufacturer as some products may be toxic.

The information, technical data and dimensions are correct at the time of printing but we reserve the right to change and improve them. This machine has been manufactured to the highest standards but care needs to be taken whilst using it to prevent injury to the user or third parties.

