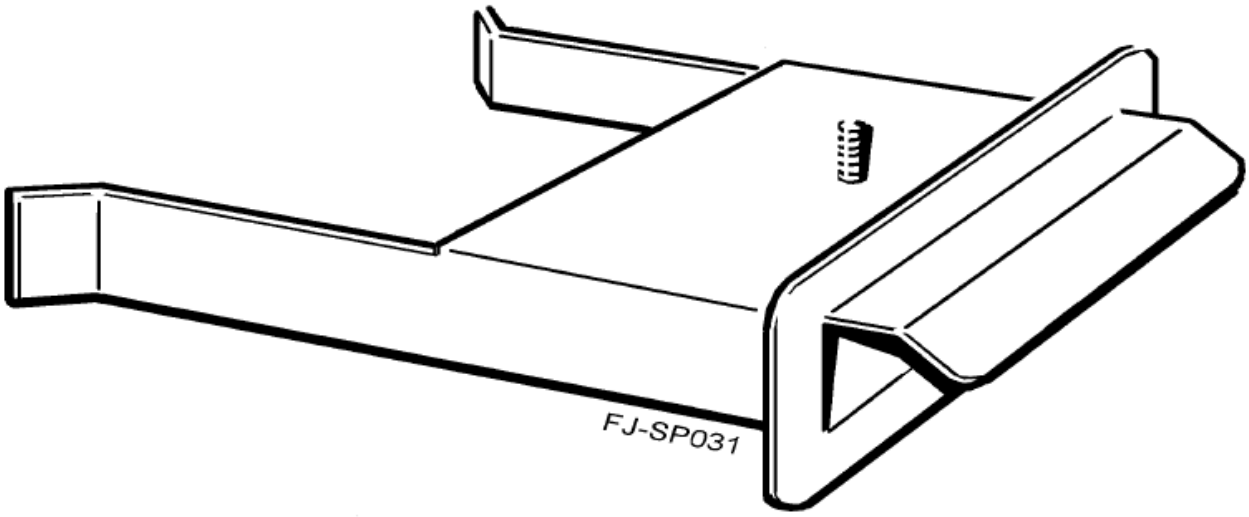
Calibration Chute

ORIGINAL OPERATING MANUAL & PARTS LIST



Read carefully before installation and operation

MADE IN BRITAIN
EST.1977

Stocks Ag Limited.
Cromwell Road, Wisbech, Cambridgeshires, PE14 0SD, UK
01945 464909 sales@stocks-ag.co.uk www.stocks-ag.co.uk

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**

CE

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UKCA. DECLARATION OF CONFORMITY

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

Date: **01st December 2020**

Position: **Managing Director**

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1.0 General Information

Congratulations on your Calibration Chute purchase:

Please check item 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

Part Number: FJ-004-CAL-PRO for use with the Fan Jet Pro 65 & 130

Net weight: **Dimensions**:

1.2 Intended Use

This Calibration Chute has been designed for calibrating the Fan Jet Pro for use in the agricultural, horticulture, and amenity sector.

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.

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.

2.0 Safety

Ensure care is taken when filling the hopper with product. 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

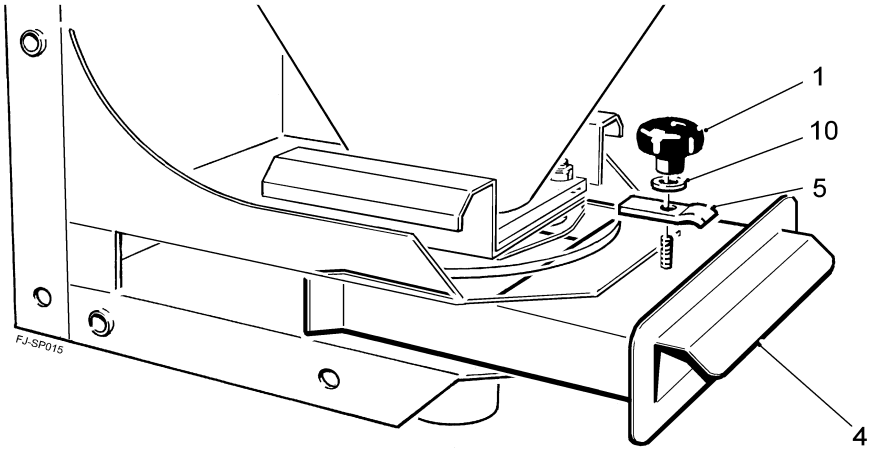
It is the responsibility of the operator or maintenance engineer to ensure safe handling of the machine and the appropriate personal protection equipment must be worn for the material being applied and to prevent contamination to the machine or the environment.

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

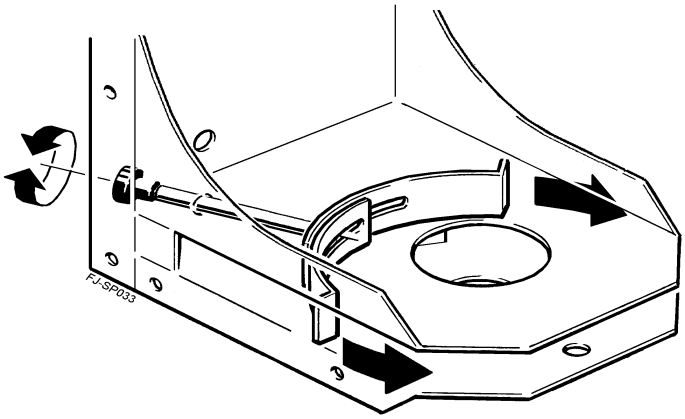
3.0 Fitting Instructions

⚠ **WARNING! Wear suitable protective clothing, face, eye and breathing protection if calibrating with slug pellets, or any other pesticide**.

NOTE: The power supply to the machine must be switched off before adjusting any deflector plates or fitting the calibration chute.



1. Place the chute (item 4) between the top and bottom plates of the Fan Jet chassis, with the threaded stud for the clamp positioned centrally in the recess, against the outer edge of the top plate. Then fit the flat washer (item 10) Ensure it is positioned square to the chassis and tighten the retaining plate clamp (5) using the threaded knob (1) to hold the chute firmly onto the machine.



The machine has two adjustable sliding deflectors that fit around the disc and are used to physically limit the throw of material off the disc in order to adjust spread width and pattern, either equally to both sides or as a border control to one side only.

NOTE: Remember the position of the deflectors in order to be able to return them to their original placement following calibration.

2. Undo the black plastic knob protruding through the rear upright chassis that secures the deflectors and slide both deflectors around the disc until the angled ends of the deflectors are firmly touching the sides of the calibration chute, to form a seal then tighten the knob to secure the deflectors in this position.

2. Fit an appropriate bag behind the flange around the aperture. Use an elastic bungee cord around the bag to hold it in position.

Once the calibration run has been completed carefully tip the Fan Jet forwards on its tipping base plate and by gently shaking empty any pellets or granules left in the chute and under the disc, into the bag before weighing (or when removing the chute)

NOTE: Ensure that the any spilt product is collected immediately. Do not allow slug pellets or other pesticides to contaminate water supplies.

4.0 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.

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

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.

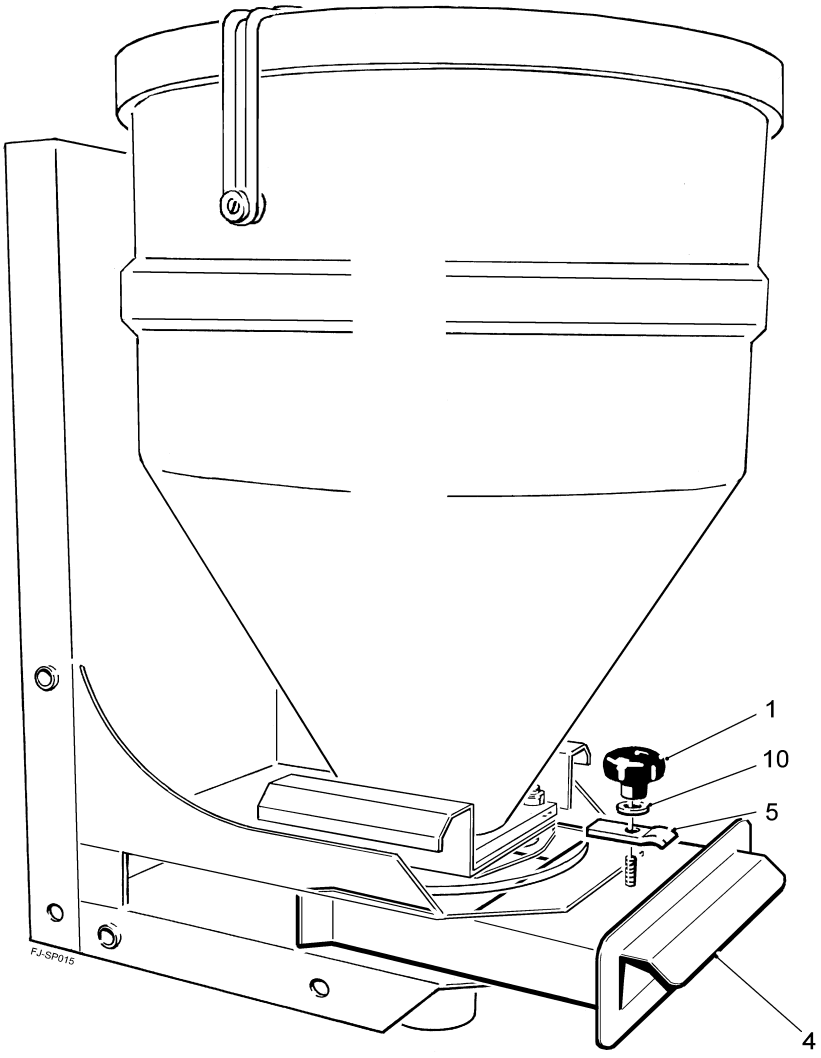
$$\frac{\text{25 kgs/ha x 10 kph x 6 metres}}{600} = \text{2.5kgs per minute flow rate}$$

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.

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

5.0 Parts Diagram



6.0 Parts List

Item	Part #	Description	Quantity	Remarks
1	FJ033A	M8 Fem Knob	1	
2				
3				
4	—	Calibration Chute Body	1	(available as part of kit)
5	FJ318F	Locking Tab	1	
6				
7				
8				
9				
10	M8-010	M8 Flat Washer	1	